

SHELF-LIFE MANAGEMENT MANUAL

SEPTEMBER 1997

DEPARTMENT OF DEFENSE
OFFICE OF THE UNDER SECRETARY OF DEFENSE
(Acquisition and Technology)

FOREWORD

This manual is issued under the authority of DoD 4140.1, Materiel Management Policy. Its purpose is to set forth policy and procedures for the supply chain (life-cycle) management of standard and hazardous shelf-life items contained in the Federal Supply System. Also, to authorize the establishment of hazardous materiel recycling and reutilization practices to ensure the reduction of the number of hazardous shelf-life items entering the hazardous waste stream.

This manual is applicable to the Military Services, the Defense Logistics Agency, Defense Special Weapons Agency, General Services Administration, United States Coast Guard, and the Federal Aviation Administration.

All recommendations for additions, deletions, and corrections shall be submitted to the appropriate Service/Agency Shelf-Life Administrators in Appendix G of this manual.

DoD Components may obtain copies of this manual through their publication channels. Other Federal agencies may obtain hard copies by submitting a DLA Form 173 to: Defense Logistics Agency, Administrative Support Center East, ATTN: ASCE-WS, 14 Dedication Drive, Suite 3, POD 43, New Cumberland, PA 17070-5011, or by calling 1-888-352-7827, DSN 977-6034. Requests for DLAPS CD-ROM may be submitted to: DLA Administrative Support Center, ATTN: DASC-OV, 8725 John J. Kingman Road, Suite 0119, Fort Belvoir, VA 22060-6220. This manual is also available on the INTERNET at: www.dlaps.hq.dla.mil.

BY ORDER OF THE DIRECTOR

MICHAEL PIPAN Director

Shelf Life Program

This manual supersedes DoD 4140.27-M, August 1990.

REPORTS REQUIRED

- 1. Report Control Symbol (RCS): DD-A(L)(A)1902
 - (a) Title: Shelf-Life Item Review
 - (b) Prepared by: ICPs for new/existing shelf-life item NSNs
 - (c) Frequency/period covered: Annual (1 Jan 31 Dec)
 - (d) Due date: 31 Jan
- 2. RCS: DD-A(L)(A)1549, Part I
 - (a) Title: Shelf-Life Management Report, Part I
- (b) Prepared by: ICPs (nonconsumable, consumable, and shelf-life item management)
 - (c) Frequency/period covered: Annual (1 Jan 31 Dec)
 - (d) Due date: 31 Jan
- 3. RCS: DD-A(SA)1549, Part II (should read DD-A(L)(A)1549)

 - (a) Title: Shelf-Life Management Report, Part II (b) Prepared by: DRMS (wholesale/retail disposals)
 - (c) Frequency/period covered: Annual (1 Jan 31 Dec)
 - (d) Due date: 31 Jan

ACRONYMS AND ABBREVIATIONS

ACRONYM OR ABBREVIATION	DEFINITION
AF AFJM	Air Force Air Force Joint Manual
AFR ALC AR ARS A	Air Force Regulation Air Logistics Center Army Regulation Agricultural Research Service Acquisition and Technology
CASKO CC CFR CH CHRIMP CONUS COPAD CRT CSPC	Component, Assembly, Set, Kit, And Outfit Condition Code Code of Federal Regulations Controlled Humidity Consolidated Hazardous Materiel Reutilization and Inventory Management Program Continental United States Contractor Operated Parts Depot Controlled Room Temperature Consumer Safety Product Commission
DCMC DCMD DD DEPRA DIC DLA DLSC DNA DOD DODAAC DODD DOE DOSO DOT DRMO DRMS DSCP DSCR DSN DSWA DVD	Defense Contract Management Command Defense Contract Management District Department of Defense Form Defense Program for Redistribution of Assets Document Identifier Code Defense Logistics Agency Defense Logistics Services Center Defense Nuclear Agency Department of Defense Department of Defense Department of Defense Directive Department of Energy DLA Operations Support Office Department of Transportation Defense Reutilization and Marketing Office Defense Reutilization and Marketing Service Defense Supply Center Philadelphia Defense Supply Center Richmond Defense Switched Network Defense Special Weapons Agency Direct Vendor Delivery
EC EDI EOQ EPA	Electronic Commerce Electronic Data Interchange Economic Order Quantity Environmental Protection Agency
EPCRA	Emergency Planning and Community Right To Know Act
FAA FAR FC-DSWA FDA	Federal Aviation Administration Federal Acquisition Regulation Field Command, Defense Special Weapons Agency Food and Drug Administration
FEDLOG FED-STD	Federal Logistics Information System (CD-ROM product) Federal Standard

FEMA Federal Emergency Management Agency

FIFO First-In-First Out

FLIS Federal Logistics Information System

FMS Foreign Military Sales FSC Federal Supply Class

GFM Government Furnished Materiel
GFP Government Furnished Products
GIM Gaining Inventory Manager
GSA General Services Administration

HAZCOM Hazardous Communication

HAZMAT or HM Hazardous Materiel

HMC Hazardous Materiel Control and Management HMIS Hazardous Materiel Information System

HQ Headquarters HW Hazardous Waste

IAW in accordance with ICP Inventory Control Point

ILP International Logistics Program ILS Integrated Logistic Support

IM Inventory Manager

IMC Internal Management Control
IMM Integrated Materiel Manager

IPG Issue Priority Group

I Interchangeability and Substitutability

ISS Issue

LIFO Last-In-First-Out

LIM Losing Inventory Manager
LR Logistics Reassignment
LSA Logistics Support Analysis

LSAR Logistics Support Analysis Record

MCO Marine Corps Order MIL-STD Military Standard

MILSTRAP Military Standard Transaction Reporting and

Accounting Procedures

MILSTRIP Military Standard Requisitioning and Issue

Procedures

MNS Mission Need Statement

MPS Maritime Prepositioned Ships

MQCSS Materiel Quality Control Storage Standards

MRO Materiel Release Order
MRP Materiel Returns Program
MSDS Materiel Safety Data Sheets

NAVMATINST Naval Materiel Command Instruction
NAVSUPINST Naval Supply Systems Command Instruction
NAV SUP PUB Naval Supply Systems Command Publication

NRC Nuclear Regulatory Commission

NSN National Stock Number
NSO Numeric Stockage Objective

OCONUS Outside the continental United States

OMB Office of Management and Budget
OSD Office of the Secretary of Defense

OSHA Occupational Safety and Health Administration

OWR Other War Reserve

POC Point of Contact

POPS Paperless Ordering Placement System

PODR Product Quality Deficiency Report PTDProvisioning Technical Document

ΡV Prime Vendor

Prepositioned War Reserves PWR

QDR Quality Deficiency Report Quality Status Listing QSL

RCS Report Control Symbol

Report of Discrepancy (replaced by SDR) ROD

RP Record Position

Semiannual SA

SA Storage Activity

SDR

Supply Discrepancy Report Secretary of the Navy Instruction Shelf-Life Code SECNAVINST

SLC Suite Stock STE-STK

Table of Organization and Allowance Table of Organization Equipment TOA TOE

ΤP Technical Publication

US United States

United States Coast Guard USCG

USD(A) Under Secretary of Defense (Acquisition and

Technology)

REFERENCES

- (a) DoD Directive 4140.1, Materiel Management Policy.
- (b) DoD Directive 5010.38, Management Control (MC) Program.
- (c) DoD Directive 5105.22, Defense Logistics Agency (DLA).
- (d) Federal Acquisition Regulation (FAR), Subparagraph 16.5.,paragraph 16.503.
- (e) DoD 4000.25-2-M, Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP), authorized by DoD Directive 4140.1.
- (f) DoD 4140.27-M, Shelf-Life Item Management Manual, authorized by DoD Regulation DoD 4140.1, Materiel Management Policy.
- (g) DoD 4160.21-M, Defense Reutilization and Marketing Manual, authorized by DoD Directive 4140.1.
- (h) DoD 7220.9-M, Department of Defense Accounting Manual, authorized by DoD Instruction 7220.9, DoD Accounting Policy.
- (i) AR 700-15/NAVSUPINST~4030.28/AFJMAN~24-206/MCO~4030.33C/DLAR~4145.7, Packaging of Materiel.
- (j) DLAR 3200.1/AR 715-13/NAVSUPINST 4120.30/AFI 121-405/MCO 4000.18C, Engineering Support for Items Supplied by Defense Logistics Agency and General Services Administration.
- (k) DLAR 4140.55/AR 735-11-2/SECNAVINST 4355.18/AFJMAN 23-215 Reporting of Item and Packaging Discrepancies.
- (1) DLAR 4155.37/AR 702-18/NAVSUPINST 4410.56/AFJMAN 23-223/MCO 4450.13, Materiel Quality Control Storage Standards.
- (m) TM 38-410/NAVSUP PUB 573/AFJMAN 23-209/MCO P4450-12/DLAM 4145.11, Storage and Handling of Hazardous Materiel.
- (n) MIL-STD 129, Standard Practice for Military Marking.
- (o) MIL-STD-290, Packaging of Petroleum and Related Products.
- (p) MIL-STD-1388-1, Logistics Support Analysis.
- (q) FED-STD-123, Marking for Shipment (Civil Agencies).
- (r) FED-STD-313, Materiel Safety Data, Transportation Data, and Disposal Data for Hazardous Materiel Furnished to Government Activities.
- (s) Department of Energy and Defense Nuclear Agency Technical Publication (TP) 100-1, Supply Management of Nuclear Weapons Materiel.
- (t) Department of Energy and Defense Nuclear Agency Technical Publication (TP) 35-51A, General Instructions applicable to Nuclear Weapons (Supplement).
- (u) DoD Directive 4210.15, Hazardous Material Pollution Prevention.
- (v) Defense Acquisition Deskbook.

DEFINITIONS

- A. <u>Consumable Item of Supply</u>. An item of supply (except explosive ordnance, major end items of equipment, and reparables) that is normally expended or used up beyond recovery in the use for which it was designed or intended.
- B. <u>Critical Application</u>. An item which is essential to weapons system performance or operation or the preservation of life or safety of operating personnel as determined by the Military Services.
- C. <u>Date Assembled</u>. The date items or parts are assembled into either Components, Assemblies, Sets, Kits and Outfits (CASKOs) or the date various CASKOs are assembled into a larger unit.
- D. <u>Date Cured</u>. The date the item or materiel was altered industrially (e.g., as to vulcanize (rubber) or to treat (synthetic elastomers) with heat or chemicals) to make infusible. The cure date is indicated by the calendar quarter followed by the calendar year (e.g., 4Q98 = fourth quarter, 1998). The day on which an item is cured shall be the last day of the quarter. In the example above the cure day would be 31 December 1998.
- E. <u>Date Manufactured</u>. The date the item, materiel, or commodity was fabricated, processed, produced or formed for use. For drugs, chemicals, and biologicals, the date of manufacture for products submitted to the Food and Drug Administration (FDA) for certification prior to release is the date of the official certification notice. For products manufactured under the license of the Agricultural Research Service (ARS), the date manufactured conforms to the definition established by the ARS. The date of manufacture shall not be shown for medical items having expiration dates.
- F. <u>Date Packed</u>. The date when the product was packaged in the unit container, regardless of dates of packing, shipping, or additional processing (used for subsistence only).
- G. <u>Expiration Date</u>. The date by which nonextendible (Type I) items should be discarded as no longer suitable for issue or use.
- H. Expiration Dating Period (Potency Period). The expiration dating period (Potency Period) represents the period beyond which the product cannot be expected to yield its specific results or retain its required potency. Applies to drugs, chemicals, and biologicals.
- I. <u>Hazardous Item</u>. An item of supply consisting of materiel that because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. FED-STD 313 identifies hazardous Federal supply items.
- J. <u>Inspect/Test Date</u>. The date by which extendible (Type II) items should be subjected to inspection, test or restoration.
- K. <u>Integrated Materiel Manager (IMM)</u>. The materiel manager responsible for the execution of assigned materiel management functions for selected items or selected Federal Supply Classes (FSCs).
- L. <u>International Logistics Program (ILP)</u>. Programs which allow Foreign Military Sales (FMS) customers to purchase U.S.Government military supplies.

- M. <u>Inventory Control Point (ICP)</u>. An organizational unit or activity within a Department of Defense(DoD) supply system which is assigned the primary responsibility for the materiel management of a group of items either for a particular Military Service or for the DoD as a whole.
- N. <u>Logistics Reassignment (LR)</u>. The transfer of materiel management responsibilities from one IMM to another IMM.
- O. <u>Materiel Management</u>. The phase of military logistics which includes managing, cataloging, requirements determination, procurement, distribution, overhaul, and disposal of materiel.
- P. <u>Next Inspect/Test Date</u>. The date designated by month or quarter, and year assigned to alert storage personnel when an item shall undergo the next inspection or test by an authorized surveillance representative.
- Q. <u>Nonconsumable Item</u>. An item of supply which is not consumed in use and which retains its original identity during the period of use such as weapons, machines, tools, and equipment.
- R. <u>Service Life</u>. A general term used to quantify the average or mean life of an item while in use. Service-life, which is depicted in years, is the number of years of economical service reasonably expected of equipment as established in applicable DoD, Service, and/or Agency manuals, bulletins, regulations, instruction manuals, and/or the technical judgment of the item and/or equipment manager.
- S. <u>Shelf Life</u>. The total period of time beginning with the date of manufacture, cure, assembly, pack (subsistence only), or inspect/test/restorative action that an item may remain in the combined wholesale (including manufacturer's) and retail storage systems and still remain suitable for issue to and/or consumption by the end user. Shelf-Life should not be confused with service life, which is a measurement of anticipated average or mean life of an item.
- T. <u>Shelf-Life Code</u>. A code assigned to a shelf-life item to identify the period of time beginning with the date of manufacture, cure, assembly, or pack (subsistence only), and ending with the date by which an item must be used (expiration date) or subjected to inspection, test, restoration, or disposal action. Appendix A provides a listing of shelf-life codes and the applicable shelf-life time periods.
- U. <u>Shelf-Life Hazardous Item</u>. An item that is hazardous and has a shelf-life code assigned. (See Chapter 7 for more details.)
- V. <u>Shelf-Life Item</u>. An individual item of supply having deteriorative or unstable characteristics to the degree that a storage time period must be assigned to ensure that it will perform satisfactorily while in service.
- W. <u>Storage Standard</u>. Mandatory instructions for the inspection testing, and/or restoration of items in storage. These standards provide guidance on storage criteria, preservation, packaging, packing, marking requirements, and time-phasing of inspections during the storage cycle to determine the materiel serviceability and degree of deterioration which has occurred.
- X. <u>Supply Condition Codes for Shelf-Life Items</u>. These specific codes provide standard criteria at the wholesale/retail level and designate the remaining shelf-life of an item from dates of manufacture, cure assembly, pack (subsistence only), inspect, test, or restoration action. Appendix B provides a complete listing of these codes and their definitions.

- Y. Type I Shelf-Life Item. An individual item of supply which is determined through an evaluation of technical test data and/or actual experience, to be an item with a definite nonextendible period of shelf-life. One exception is Type I medical items which may be extended if they have been accepted as candidates for the DoD/FDA Shelf-Life Extension Program.
- Z. <u>Type II Shelf-Life Item</u>. An individual item of supply having an assigned shelf-life time period that may be extended after completion of inspection, test, or restorative action.

CHAPTER 1

OVERVIEW

1-1. AUTHORITY. DoD Directive 4140.1.

1-2. PURPOSE

- A. Provide policy and procedures for the supply chain (life-cycle) management of standard and hazardous shelf-life items contained in the Federal Supply System.
- B. Authorize the establishment of hazardous materiel recycling and reutilization practices to ensure the reduction of the number of hazardous shelf-life items entering the hazardous waste (HW) stream.
- C. Authorize the establishment of Internal Management Controls (IMC) by DoD Components to ensure a reliable and accurate audit trail for the management of shelf-life items.
 - D. This revision supersedes the August 1990 edition of DoD 4140.27-M.

1-3. BACKGROUND

- A. All items assigned a National Stock Number(NSN) in the DoD and non-DoD supply systems will be designated by a specific shelf-life code if they meet the shelf-life criteria. This code identifies the length of the shelf-life period expressed in months.
- B. Shelf-Life items require more controlled management, from item introduction through replenishment and storage to ultimate disposal, in order to minimize losses to the Government.
- 1. Prior to acquisition, efforts shall be made to properly identify the shelf-life characteristics of an item, and to ascertain whether a nonhazardous, non-shelf-life, or recycled item can be procured.
- 2. Inventory managers (IMs) at the wholesale level, as well as the retail level, will strive to adjust replenishment levels to ensure that purchased quantities can be used within the assigned shelf-life time period.
- 3. SAs will adhere to the First-In-First-Out (FIFO) method of issuing shelf-life materiel unless otherwise authorized.
- 4. Shelf-Life materiel which is approaching expiration will be marketed to prevent disposal of materiel. This may include discounts and free issue to interested customers.

1-4. APPLICABILITY

- A. This manual applies to the Military Services (i.e., Army, Navy, Air Force, and Marine Corps), the Defense Logistics Agency (DLA), Defense Special Weapons Agency (DSWA), General Services Administration (GSA), United States Coast Guard (USCG), and the Federal Aviation Administration (FAA).
- B. GSA complies with all requirements of this manual except those which are specific to DoD.
- C. USCG and FAA have adopted this manual as a standard inventory management tool.
- D. Ammunition (Class V) and bulk petroleum commodities are excluded from this manual and shall continue to be managed in accordance with (IAW) existing regulations. Although these commodities are excluded from

this manual, ammunition (Class V) and bulk petroleum will be represented by their appropriate Service member to the DoD shelf-life committee. Additionally, each Service will designate an ammunition and bulk petroleum representative to ensure that policy changes are properly coordinated.

 $1-5. \ \underline{OBJECTIVE}$. To ensure compatibility of policies and procedures in the designation, acquisition and materiel management of consumable and nonconsumable shelf-life items in the DoD wholesale and retail supply systems.

1-6. RESPONSIBILITIES

- A. The Under Secretary of Defense ((Acquisition and Technology) (USD(A)) has delegated all authority and responsibility for the shelflife program to the Director, DLA.
 - B. The Director, DLA shall:
- 1. Direct the shelf-life management program in accordance with the responsibilities assigned in DoD Directive 5105.22.
- 2. Chair shelf-life committee conferences under the Appendix D charter.
- 3. Establish or abolish shelf-life subcommittees, Appendix E, as necessary.
- 4. Establish policy and provide procedures for shelf-life item supply chain (life-cycle) management and assure implementation of these policies and procedures in a uniform manner throughout DoD, GSA, FAA and the USCG.
- 5. Monitor and evaluate the effectiveness of the shelf-life program and make policy or program changes, as required.
- 6. Determine the adequacy of reporting and monitoring techniques that measure the degree to which the program objectives are achieved.
- 7. Develop and maintain this manual in a current status to reflect the provisions of reference (a). These actions shall be taken in coordination with the DoD Components, GSA, USCG, and FAA.
- 8. Designate shelf-life types and associated shelf-life time periods.
- 9. Establish an IMC Program to monitor changes to shelf-life items throughout their supply chain (life cycle).
- 10. Develop, maintain, and implement joint regulation DLAR 4155.37/AR 702-18/NAVSUPINST 4410.56/AFR 69-10/MCO 4450.13. These actions shall be taken in coordination with the DoD Components, GSA, USCG, and FAA.
- 11. Provide uniform packaging for assigned shelf-life items in accordance with DoDD 5010.38.
- 12. Maintain liaison with the other DoD Components, GSA, USCG, and the FAA to assist in resolving problems related to shelf-life management.
- 13. Prepare, monitor and evaluate reports on shelf-life management.
 - C. The DoD Components shall:
- 1. Assist the Shelf-Life Director in maintaining this manual in a current status.
- 2. Assist the Shelf-Life Director in establishing or abolishing shelf-life subcommittees, Appendix E, and ensure representation to the subcommittees, as appropriate.
 - 3. Ensure that their Service/Agency complies with this manual.
- 4. Designate shelf-life items by type, prescribe associated shelflife periods, and develop technical documentation.

 5. Establish an IMC Program to monitor the shelf-life items
- throughout their supply chain (life cycle).

- 6. Provide for uniform packaging of shelf-life items IAW DoDD
 - 7. Provide technical engineering support IAW DoDD 5105.22.
- 8. Prepare, monitor, and/or evaluate reports on shelf-life management.
- 9. Maintain and implement joint regulation, Materiel Quality Control Storage Standards, DLAR 4155.37/AR702-18/NAVSUPINST 4410.56/AFJMAN 23-223/MCO 4450.13, for that materiel which the DoD Components have source of supply responsibility.
- 10. Monitor and evaluate the effectiveness of their respective shelf-life programs.
- 11. Ensure that shelf-life items have been reviewed for accurate shelf-life codes (SLC) prior to logistics reassignment (LR).
- 12. Develop, maintain and revise military drawings, standards, and specifications, as necessary, for accurate shelf-life requirements.
 - D. The General Services Administration (GSA) shall:
- 1. Assist the Shelf-Life Director in maintaining this manual in a current status.
- 2. Assist the Shelf-Life Director in establishing or abolishing shelf-life subcommittees, Appendix E, and ensure representation to the subcommittees, as appropriate.
- 3. Designate shelf-life items by type, prescribe associated shelf-
- life periods, and develop technical documentation.
 4. Establish an IMC program to monitor shelf-life items throughout their life cycle.
- 5. Maintain and implement joint regulation DLAR 4155.37/AR702-18/NAVSUPINST 4410.56/AFJMAN 23-223 MCO 4450.13, for that materiel for which GSA has the source of supply responsibility.
- 6. Monitor and evaluate the effectiveness of the GSA shelf-life management program.
- E. Other Federal Agencies, e.g., FAA, USCG, at their discretion shall:
- 1. Adopt this manual as a management tool and source of information to establish shelf-life programs within their agencies.
- 2. Assist the Shelf-Life Director in establishing or abolishing shelf-life subcommittees, Appendix E, and ensure representation to the subcommittees, as appropriate.
- 3. Monitor and evaluate the effectiveness of their respective shelf-life management programs.
- 1-7. **EFFECTIVE DATE**. This manual is effective immediately.

1-8. MANUAL MAINTENANCE

- A. Maintenance of the Manual. This manual is prepared and published by DLA in cooperation with other DoD Components, GSA, USCG and FAA, and is required to be distributed to personnel in all activities that are concerned with the Shelf-Life Management Program. This manual is maintained by the DEFENSE LOGISTICS AGENCY, 8725 JOHN J. KINGMAN ROAD, SUITE 4235, FORT BELVOIR, VA 22060-6221.
- B. Submitting Proposed Changes. All recommendations for additions, deletions, and corrections shall be submitted to the appropriate Service/Agency shelf-life administrators in Appendix G. After review and approval by the shelf-life administrators, the recommended change(s)shall be forwarded to the DoD Shelf-Life Program Director for staffing within the DoD Shelf-Life Committee.

C. <u>Coordination Control</u>. DLA shall ensure that changes or revisions to this manual are coordinated with the DoD Components, GSA, USCG, and the FAA prior to publication.

D. <u>Publication of Revisions</u>

- 1. <u>Formal Changes</u>. Formal changes shall be numbered consecutively and issued as full page insertions to this manual. These changes shall indicate the change number on each revised page. When it is necessary to supplement page changes with explanatory information, such explanation shall be contained in the cover letter.
- 2. <u>Interim Changes</u>. When it is necessary to disseminate modifications to this manual more expeditiously, interim changes shall be distributed. Interim changes shall be forwarded to the DoD Shelf-Life Committee administrators as full page replacements. Interim changes are canceled by publication of the formal change.

1-9. NUMBERING SYSTEM

- A. <u>Chapters and Paragraphs</u>. The paragraph numbering system of this manual is designed to indicate the chapter and paragraph for identification and reference purposes. Subdivisions of paragraphs are indicated by lower case letter, number in parentheses, and lower case letter in parentheses, in that order. The following applies:
 - Chapter: 1
 Paragraph: 3
 - 3. Subparagraph: A(1)(a)
- B. <u>Pages</u>. Pages are numbered in a separate series for each chapter. Pages are numbered in sequence with Arabic numerals beginning with 1. Each page number is preceded by the number of the chapter; for example: the second page of chapter 3 is numbered 3-2.
- C. <u>Appendices</u>. Appendices are identified in alphabetical sequence, beginning with the letter "A" for the first appendix. The letter "O" shall be excluded from use as an appendix identifier. Pages within appendices shall be sequentially numbered using Arabic numerals, beginning with the Arabic numeral 1 for each appendix; e.g., the first page of appendix B would be numbered B-1, with page 2 identified as B-2.

1-10. REFERENCING THIS MANUAL.

Reference to this manual in correspondence, messages, and e-mail shall be reflected as follows:

- A. <u>Correspondence or E-Mail</u>. Shown by stating DoD 4140.27-M, Shelf-Life Item Management Manual in designated reference sequence. Specific paragraphs, subparagraphs or appendices shall be separately identified and addressed in the body of the correspondence.
- B. $\underline{\text{Messages}}$. Dependent on message format used, may be shown in UPPER CASE LETTERS as:
- 1. $\underline{\text{Example}}$. A. DoD 4140.27-M, SHELF-LIFE ITEM MANAGEMENT MANUAL, in designated reference sequence. Specific paragraphs, subparagraphs or appendices shall be separately identified and addressed in the body of the message.
- 2. $\underline{\text{Example}}$. B. DoD 4140.27-M, CHAPTER 1, PARAGRAPH 1-5(3), for singular issue.

CHAPTER 2

GENERAL POLICIES

2-1. GENERAL

- A. Policies in the chapter apply to all functional areas within the Shelf-Life program.
- B. The policies in this manual govern supply chain (life-cycle) management of standard and hazardous shelf-life items and consumable (expendable) and nonconsumable (nonexpendable) shelf-life items.
- C. Designation of items for shelf-life management shall be held to a minimum since these items require special controls and specialized handling along with higher related costs.
- 1. Only items with known deteriorative characteristics will be included in the program.
- 2. Items shall not be designated as shelf-life to facilitate storage control.
- D. Within DoD, the basic responsibility for the control of shelf-life items is vested in the ICPs, which depend upon the accuracy of data contained in accountable records. Storage personnel at all supply echelons are responsible for executing the control programs as directed by the ICP. Effective shelf-life control at the warehouse level requires vigilance on the part of all personnel and careful supervision and understanding of the intent and purpose of the control procedures.
- E. Shelf-Life administrators exist at the Service/Agency Headquarters (HQ). Appendix G lists the administrators who are responsible for all shelf-life related policy and procedural issues at their HQ, ICPs or SAs to include higher level inquiries and audits. Changes to the administrators shall be submitted to the Program Director as they occur. The administrators also maintain a list of the ICP and SA focal points. Shelf-Life challenge requests shall be submitted to the Service/Agency (SA) administrators.
- F. Following issuance of shelf-life materiel from wholesale or retail SAs to the customer/requisitioner, shelf-life management becomes the responsibility of the activity now holding the stock. The consumer level activity must maintain and adhere to procedures that ensure that only serviceable shelf-life items are used. DoD 4140.27-M can be used as guidance for management of materiel until it is consumed.
- G. Management of shelf-life items shall be accomplished to maintain the requisite level of stock availability and to minimize the risk of shelf-life expiration prior to issue. Utmost reliance shall be placed on the contractor's distribution system for shelf-life items, consistent with operational readiness requirements. If materiel is stocked, it shall be stocked prudently.
- H. When the SAs determine that shelf-life materiel has deteriorated and is no longer issuable, but the expiration date or the first inspection or test date has not yet been reached, the SA shall not use the materiel but report this materiel to the managing ICP by way of a Product Quality Deficiency Report(PQDR), Supply Deficiency Report (SDR) or DD Form 1225, Storage Quality Control Report, as appropriate. The SA will suspend the materiel in condition code "L" in those cases where the materiel has been stored in compliance with current storage standards. In those cases where the standards have been compromised, the materiel will be suspended in condition code "J." The managing ICP shall, in turn, contact the manufacturer of the materiel to either seek

replacement or reimbursement for this materiel. The appropriateness of the shelf-life code and/or storage conditions should be reevaluated at this time.

I. SDRs shall be prepared and processed on shelf-life items in accordance with Joint Regulation DLAR 4140.55/AR 735-11-2/SECNAVINST 4355.18/AFJMAN 23-215, regardless of dollar value. Expeditious submission and processing of shelf-life hazardous SDRs and shelf-life SDRs in that order, shall be performed. This will ensure that the maximum amount ofshelf life remains after SDR resolution.

J. Shelf-Life Code Challenges

- 1. Shelf-Life Code Challenges shall be based on the following:
 - a. Experience.
 - b. Observations.
- c. Government, contractor, or commercial user's storage history and experience.
 - d. Recognition of erroneously assigned shelf-life codes.
- e. Type II (extendible) shelf-life items being extended more than twice. Type II shelf-life items extended more than twice shall be considered for removal from shelf-life control and reassigned a shelf-life code of 0 (zero).
- $\ensuremath{\text{f.}}$ Recognition of hazardous items that require frequent or costly disposal.
- 2. The shelf-life code challenge request shall be forwarded to the shelf-life administrators, Appendix G, by way of a letter, phone call, or E-Mail. The administrator shall respond to the challenge request within 30 days. The following information shall be included in the challenge request.
 - a. NSN.
 - b. Nomenclature.
 - c. Unit of Issue.
 - d. Existing shelf-life code.
 - e. Recommended shelf-life code.
- f. Findings and recommendations to include the reasons why the shelf-life code of the item should be changed.
- g. Name, organizational symbol, and Defense Switched Network (DSN) or commercial phone number of the person forwarding the challenge request.
- K. Wholesale shelf-life items shall be stocked in the least number of geographical locations. Maximum use shall be made of the contractor's distribution system to lessen Government stockage. Hazardous shelf-life items shall be stocked only in Service/Agency-approved conforming facilities.
- L. Shelf-Life policies contained in this Manual are applicable to Government Furnished Materiel (GFM) and Government Furnished Products (GFP) provided to a contractor for the fabrication/production of an end item. Management and storage of GFM and GFP shall be subject to the same restrictions and controls that are placed on materiels and items procured from commercial sources.
- M. Shelf life should not be confused with service life, which is a measurement of anticipated average or mean life of an item while in use (see definitions on page xv).
- N. Each using DoD Component with interest in the item, shall provide technical and engineering support for DLA and GSA shelf-life items in accordance with Joint Regulation DLAR 3200.1/AR 715-13/NAVSUPINST 4120.30/AFI 121-405/MCO 4000.18C.

- O. Shelf-Life policies contained in this manual apply to private sector contractors performing Government work authorized through the Office of Management and Budget (OMB) Circular A-76. Shelf-Life requirements will be included in all A-76 contracts.
- P. The Navy has assigned Shelf-Life Coordinators at a number of regions to assist storage personnel, and customers ashore and afloat, in resolving shelf-life related issues. The coordinators typically provide on-site visits and are available to all DoD facilities. The Navy Administrator for the DoD Shelf-Life Program may be contacted if the coordinators' assistance is required.

Q. Storage Standards

- 1. Storage standards provide instructions for the inspection, testing, and restoration of items in storage. These instructions encompass storage, packaging, marking and inspection or testing requirements. The purpose of using the storage standards is to determine the materiel's serviceability, to determine the degree of degradation that has occurred to that materiel and to prescribe maintenance and packaging required for restoration.
- 2. Storage standards are required to be prepared by the managing wholesale ICP or other responsible organization for Type II shelf-life items. They may also be prepared for other items at the option of the managing ICP, e.g., Type I (nonextendible) shelf-life items, critical application, principal, regulated, sensitive or hazardous items. They are used at the wholesale and retail levels to determine if these items have retained sufficient quantities of their original characteristics and are of a quality level which warrants extension of their assigned time period and the length of such extension. DLAR 4155.37/AR 702-18/NAVSUPINST 4410.56/AFJMAN 23-223/MCO 4450.13, provides the policy and procedures for the preparation and use of the storage standards. It should be noted that storage standards are intended for materiel which is stored as prescribed in the regulation. If materiel is stored in other than the facility characteristics or type of storage specified in the regulation, the inspection frequency may be increased and the materiel shall be inspected before use.
- 3. On-line access to the storage standards is available. Instructions for access are available from the DLA Operations Support Office (DOSO) at DSN 695-5212/5224/3380 or Commercial (804) 279-5212/5224/3380.
- R. The U.S. Army Corps of Engineers has developed a kit to test common exterior and interior latex and oil based paints. Components to make the kit can be purchased locally. A video describing the test kit is available from the Army Corps of Engineers, Office of Public Affairs Champlaign, IL at (217) 373-7216.
- S. All data elements and codes prescribed in this manual are registered with the USD (Comptroller) under DoD 5000.12-M.

2-2. SHELF-LIFE CODE (SLC)

- A. Items of supply will be assigned SLCs by the Military Service/Agency Manager or other responsible organization, hereafter known as the ICP, following a technical evaluation of the deteriorative or unstable characteristics of the item. This evaluation will be done by a technical and/or engineering support activity within the component.
- B. Each item of supply will be assigned only one SLC. This code shall designate the item as Type I (alpha) or Type II (numeric) and have the associated shelf-life period (months) assigned to the item as depicted in Appendix A.

- C. SLCs are designed to reflect the assigned time period at the end of which Type I items are unfit for use (expiration date) and Type II items are inspected, tested or other restorative actions are taken as required by the storage standard. These codes shall be used in conjunction with supply condition codes (Appendix B) as the basis for management control of shelf-life items. All items not designated as shelf-life items in accordance with this manual shall be considered not sufficiently deteriorative to require specific control and shall be identified by shelf-life code O (zero). GSA does not issue shelf-life items by condition codes. Therefore, portions of this manual which pertain to MILSTRAP and utilization of condition codes are not applicable to GSA.
- D. When one item in the same interchangeable or family group has a change made to its SLC, an SLC change shall be considered for other items in this same interchangeable and/or substitute group.
- E. If an item is repaired or overhauled, and the item or component controlling shelf-life in that repairable is replaced, a new SLC may need to be established for that item that is being repaired or overhauled.
- F. If non-shelf-life materiel with shelf-life markings is received and/or stored by either wholesale or retail activities, the receiving and/or storing activity shall verify the code by using the Federal Logistics Information System (CD-ROM) (FEDLOG) or the Federal Logistics Information System (FLIS) catalog. If there is a discrepancy between the FLIS and the item received, the SLC can be verified by contacting the Service Agency Administrator in Appendix G. If the ICP determines that the item is shelf-life and corresponds to the code of the materiel received, the ICP shall update the FLIS record and any other records to reflect the correct code. If the ICP determines that the item is not shelf-life, the ICP shall advise the receiving and/or storing activity of disposition instructions. In this case, consideration must be given by the ICP as to whether the item was previously a shelf-life item, but was taken out of the shelf-life program because of an improved materiel and/or product. In this case, the old item would still be shelf-life, but the new item would not be shelf-life.

2-3. INTERNAL MANAGEMENT CONTROL (IMC) PROGRAM

- A. Shelf-Life will be established as an element of annual IMC assessments required by DoD 5010.38.
- B. Internal procedures and checklists used as guidance for the management and storage of shelf-life items will be developed by the DoD Director or each Service and Agency and made available as reference documents to be used by the wholesale or retail activities.

2-4. TOTAL QUALITY MANAGEMENT.

The successful operation of a shelf-life management program depends on the implementation of Total Quality Management principles. The quality of the product delivered and the services provided the customer will improve if there is a commitment to remove the causes of potential problem areas.

2-5. SHELF-LIFE TRAINING.

A DoD-wide Shelf-Life training program is available to all Military Services and Agencies including civil agencies. The program includes ICP, SA, and retail training. The DOSO is the point of contact for the training. The Service/Agency Shelf-Life Program administrators in Appendix G should be contacted for training information.

2-6. AIR FORCE (AF) SHELF-LIFE EXEMPTION PROGRAM.

The Air Force has established a retail level shelf-life exemption program to modify the management controls normally required on shelf-life items. Those items stored by the Air Force retail supply activities which are assigned an SLC by another DoD Component ICP are exempted from retail shelf-life management procedures either on an item-by-item basis; or by FSC if all individual items within that FSC have been reviewed and a determination made that all items in that FSC will be exempted. When only certain NSNs within an FSC are exempted, each of these NSNs shall be specified in Air Force Directives. Local records shall remain compatible with the FLIS Total Item Record. Therefore, Air Force-exempted items shall be identified in the Air Force supply and distribution system or systems by a means other than changing the ICP-assigned shelf-life code. The following policies apply to these items:

- A. The Air Force Exemption Program is only applicable to retail stocks issued to Air Logistics Centers (ALCs) and to other Air Force bases. The exemption does not apply to wholesale stocks stored at the ALCs, nor does it apply to retail stocks that are stored in the ALC warehouses that are operated by DLA.
- B. Notification of the Air Force decision to exempt an item from shelf-life control shall be provided to the managing ICP. The managing ICP shall review these exempted items to determine if they shall remain within the DoD Shelf-Life Program.
- C. Air Force exempted shelf-life items shall be inspected or tested before reporting of excesses to the ICPs. Reporting of excesses is not allowed for expired Type I Air Force Service exempted shelf-life items.
- D. If the exempted shelf-life items have passed their expiration date or inspect/test date, materiel will not be used.
- E. Users of these items should be aware that the exempted shelf-life items are managed as shelf-life by wholesale manager and to ensure a safe and reliable material will be examined for deterioration prior to use.
- F. Exempted items shall be afforded the same specialized storage conditions as the shelf-life items which are not exempted; i.e., controlled temperature or controlled humidity.
- G. Exempted items which are disposed of due to expiration shall be disposed under condition code H, management code T. This includes Type II shelf-life items which can no longer be extended. This will ensure that the DoD Shelf-Life Item Management Report reflects accurate information.

CHAPTER 3

INTRODUCTION OF SHELF-LIFE ITEMS INTO THE SUPPLY SYSTEM

3-1. GENERAL

- A. All items entering the supply systems undergo a preliminary evaluations to determine the need for the item as well as the method and degree of support the item will require throughout its supply chain (life cycle). This evaluation may be part of a broad review required by the provisioning process; or it could consist of the review and introduction of a single item. If an item is deemed or known to be hazardous, such determination shall be made at this time, and a decision made by the Government whether to accept the item for support.
- B. Defense Acquisition Deskbook and DoDD 5000.1, provide OSD guidance pertaining to acquisition policies and procedures.
 - C. Integrated Logistics Support (ILS)
- 1. Acquisition practices for ILS include Logistics Support Analysis (LSA) (MIL-STD-1388-1), as part of the review process for items requiring provisioning support.
- 2. SLCs appear early in the life cycle review as part of the Logistics Support Analysis Record (LSAR).
- 3. The LSAR process provides assurances that Reliability, Availability, and Maintainability factors have been considered and are documented. Documentation must provide descriptions of the maintenance/restorative actions that become necessary because of shelf-life considerations.
- D. If provisioned materiel contains shelf-life items, codes and other supporting data (i.e., drawings, standards, specifications), these must be included in contract requirements as deliverable items for any procurement actions.
- E. Provisioning Technical Documentation (PTD) and Engineering Data for provisioning (MIL-STD-1388) are required to be provided by contractors to support provisioning conferences.
- F. At the provisioning conference the Government selects support items and assigns technical and management codes.
- G. Each DoD Component involved in the provisioning program which has authority to acquire data from contractors will develop and maintain an effective data management program.
- 1. To identify and justify the minimum data required for each item of materiel.
- 2. Provide controls for the procurement, preparation, acceptance, delivery, storage, retrieval, review, update, interchange, and distribution of all data throughout the supply chain (life cycle) of the materiel.
- H. The following provisioning process phases will be used in the review and introduction of new shelf-life items into the supply system:
- 1. <u>Mission-Need Justification</u>. Each DoD Component sponsoring the introduction of a new item of supply will provide documented certification of a need for the item at all levels of the supply systems. As a minimum, DLA will be provided a statistical breakdown of usage data from all Military Services as part of this justification. An

item having potential use as Prepositioned War Reserve (PWR), Other War Reserve (OWR), Maritime Prepositioned Ships (MPS), or Geographical Prepositioned Storage (GPS), will have to be identified early in this phase.

- 2. <u>Concept Exploration/Definition Phase</u>. This phase begins with the approval of a Mission Need Statement (MNS), which defines projected need in broad operational terms. Studies are conducted of alternative materiel concepts to identify the most promising potential solution.
- 3. <u>Demonstrations and Validation</u>. This phase requires the documentation of any potential environmental impact as well as the results from any testing and evaluation. Documentation will include statistical tolerances for such areas as storage facility temperature fluctuations, climate extremes, or special packaging requirements. Each of these factors contributes to the acceleration of the deterioration process.
- 4. <u>Manufacturing Development</u>. This requires a commitment of materiel and personnel resources to the production of a specific item, or group of items, having shelf-life properties. During this phase, manufacturing methods and standards are developed, tested, refined, and eventually codified.
- 5. <u>Production</u>. This phase occurs after pre-manufacturing tasks are completed and scheduled production of shelf-life materiel is established. Defense Contract Management Districts (DCMD) must ensure that all manufacturers of shelf-life items assure that all steps of the production process are completed as soon as possible to guarantee the maximum remaining shelf-life at the time of shipment.
- 6. <u>Operation and Support</u>. This phase occurs after the initial procurement is complete and the system is sustained in the operational environment. During this time modifications are applied and configuration control is maintained.

3-2. REVIEW PRIOR TO ITEM ENTRY

- A. Prior to the assignment of the SLC, those organizations involved in provisioning, system development, weapons systems development, and end item development shall:
 - 1. Analyze the deteriorative qualities of the materiel.
 - 2. Determine the shelf-life of the materiel.
 - 3. Review contractor assigned shelf-life designations.
- 4. Identify and use replacement and/or substitute items which do not require shelf-life management.
- 5. Identify and use replacement and/or substitute items which have a longer shelf-life period than the previously recommended shelf-life period.
- 6. Identify and use replacement and/or substitute non-hazardous or less hazardous items.
- 7. Consider use of smaller units of issue especially for hazardous shelf-life items.
- 8. Consider use of improved packaging to prolong shelf-life, especially for hazardous shelf-life items. All modifications for hazardous items will meet the requirements of Code of Federal Regulations Title 49 (CFR Title 49).

- 9. Determine inspection, test and restoration actions that are required for extendible (Type II) shelf-life items.
- 10. Document the above evaluations in order to assist the ICP in the preparation of the storage standards for extendible (Type II) shelf-life items and to address future audits.
- 11. Ensure replacement and/or substitute items do not affect health, safety, welfare or mission capability.
 - 12. Assign appropriate SLCs.
- B. Failure to assign an SLC to an item may result in the deterioration of materiel in storage while in the user's possession. Adverse safety and health situations could be the ultimate outcome (e.g., deteriorated drugs, food, chemicals, adhesives or other spare parts).

CHAPTER 4

MATERIEL MANAGEMENT AT INVENTORY CONTROL POINTS AND STORAGE ACTIVITIES

4-1. GENERAL

- A. Shelf-Life coded items shall reside and be properly identified in an ICP record such as a National Inventory Record File (NIRF), and in the Storage Activity (SA) record, such as the Locator File.
- 1. SLCs appropriate to an items-technical specification are required to allow requisition editing and issuance of materiel with consideration given to remaining shelf-life on stored wholesale stocks.
- 2. Shelf-Life coded items also allow shelf-life factors to be considered in the computation of requirements for replenishment buys, stratification of potential excesses, application of on-hand assets to system deficiencies, and control of customer returns of excess stocks.
- B. ICPs and SAs shall ensure that SLC incompatibilities do not exist. To ensure this, only one individual and/or office within the ICP shall authorize and control SLC changes. SAs shall not make revisions to the SLCs except when authorized by that individual and/or office. Contact the ICP shelf-life focal point to determine the person authorized to make the SLC changes.
- C. Shelf-Life markings on physical materiel are expressed by month or quarter and year designations (i.e., 11/98, or 3Q98). Shelf-life periods end with the last day of the cited month or quarter. Shelf-life designations in shelf-life systems will reflect century century, year year, month month (CCYYMM) and century century, year year, quarter quarter (CCYYQQ) to accommodate the next century.

D. Storage Standards

- 1. Storage Standards will be prepared by the managing ICP and made available to the appropriate wholesale and retail SAs. It is mandatory that ICPs load storage standard information into the Materiel Quality Control Storage Standards (MQCSS).
- 2. Storage Standards are published in joint regulation DLAR 4155.37/AR 702-18/NAVSUPINST 4410.56/AFJMAN 23-223/MCO 4450.13. Each Military Service and DLA ICP us assigned a different Appendix to this regulation; e.g., "C" for DLA's Defense Supply Center, Columbus, "N" for the Navy Inventory Control Point.
- 3. On line access to the storage standards is available. Instructions for access are available from the DOSO, DSN 695-5212/5224/3380 or commercial $(804)\ 279-5212/5224/3380$.
- 4. The ICP shelf-life focal point will prepare the storage standards in accordance with the Joint Regulation DLAR 4155.37/AR 702-18/NAVSUPINST 4410.56/AFJMAN~23-223/MCO~4450.13.
- E. Following assignment of the SLC, the ICP technical function or the shelf-life focal point has the responsibility to prepare storage standards, assign 85 percent shelf-life remaining requirements, and assign MIL-STD-12, FED-STD-123, or MIL-STD-290 markings.
- F. SAs will provide the ICP with timely adjustments to the ICP record; e.g., Document Identifier Code (DIC) "DAC," Inventory Adjustment Dual (Condition Transfer) Card to change condition codes. Timely update by the ICP is required to assure that the ICP record contains accurate data when replenishment decisions are made.

G. Failure to assign an SLC to an item (when in fact it should have been assigned) may result in the deterioration of materiel in storage or while in the user's possession. Adverse safety and health situations could be the ultimate outcome (e.g., deteriorated drugs, food, chemicals, and adhesives).

4-2. LOGISTICS REASSIGNMENT (LR)

- A. Logistic reassignments (LR) occur when an ICP, or similar organization, transfers management responsibility (losing inventory manager (LIM)) to another logistics activity (gaining inventory manager (GIM)). LIMs and GIMs effect LRs in accordance with Chapter II, DoD 4000.25-2-M.
- B. An LR occurs routinely on an item-by-item basis, as a result of scheduled management reviews or for special projects; e.g., Consumable Item Transfer.
 - C. On all LRs the LIM will transfer the following data to the GIM:
- 1. SLCs (existing and recommended), unless through negotiations with the GIM the LIM concurs with an SLC change.
- 2. LIM storage standards to include all inspection and testing instructions.
- 3. Application of any contractor or manufacturer warranty provisions.
- $4.\ {
 m The\ technical\ data\ package/documentation\ currently\ available}$ for the specific item.
- D. Non-shelf-life items, identified by shelf-life code 0, shall be reviewed by the GIM on the first acquisition after the transfer to determine the validity of assigning a 0 code.

4-3. REVIEW AFTER ITEM ENTRY

- A. After the ICP assumes management of a shelf-life item typically from provisioning or logistics transfer, the ICP shall accomplish items 1-12, Chapter 3, paragraph 3-2.A, of this manual.
- B. After a determination is made regarding the SLC designation of new and existing items, the review process shall be documented on a local form, letter, brief, or similar data base and made a part of the permanent record. This record shall contain, as a minimum, the following information:
- 1. The reasons why an item was designated as shelf-life, the identification of the shelf-life materiel, including the SLC, the document used to assign the SLC, the type of shelf-life assigned, plus any other pertinent information.
- 2. The contractor furnished criteria or standards that are used for testing or inspection of extendible (Type II) shelf-life items.
- C. The ICP shall conduct the above subparagraph A review for all existing managed items at least once every 5 years in accordance with the IMC process, or at the call of the DoD Shelf-Life Program Director.

Existing items shall also be reviewed when one or more of the following conditions occur on an item:

- 1. Specification change.
- 2. Technology change.
- 3. Testing change.
- 4. Revised industry practice.
- 5. Challenge from a customer, requisitioner, SA or another ICP.
- 6. Past experience at the ICP, user, or SA.
- 7. Usage or user change.
- D. A yearly report on the results of the new and existing item review shall be forwarded by the ICP to the Director, DoD Shelf-Life Program, no later than 31 January of each year. The time period covered for the reports is 1 January through 31 December. A separate report is required for new and existing items. The annual review requirement has been assigned Report Control Symbol DD A (L)(A)1902. Both reports shall be in the following format:

<u>FSC</u>	Number Items <u>Deleted</u>	Number Items <u>Reviewed</u>	Period <u>Lengthened</u>	Period <u>Shortened</u>
5330	500	70	40	20
5340	600	80	30	60
TOTAL	1100	150	70	80

4-4. CATALOGING

- A. SLCs are posted in the Management Data section of the FLIS Total Item Record.
- B. Only one SLC will be assigned to each item of supply. These codes are input to the DoD catalog to alert the ICP and SA to an item's assigned shelf-life time period at the end of which Type I items will be considered for disposal, and Type II items will be inspected, tested, or restorative actions taken, as required.
- C. ICPs, SAs, and using activities will be advised of new shelf-life items and shelf-life coding changes through the catalog change process.

4-5. INTERCHANGEABILITY/SUBSTITUTABILITY (I).

If an item in the same I family group has a change made to its shelf-life designation, a shelf-life code change will be considered for other items in the same I family group.

4-6. QUALITY ASSURANCE

- A. DoD Components shall prescribe quality assurance procedures for shelf-life items within their procurement and storage operations.
- B. Each ICP will initiate a substantive review process of delivery, storage, and issue. The following policies shall be adhered to in order to assure quality and to ensure maximum shelf-life remaining.
- 1. Contractor compliance with the requirement to have 85 percent of the shelf life remaining at time of receipt by the first Government activity.

- 2. Contractor compliance with MIL-STD-129 requirements.
- 3. Adherence to placing materiel in environmentally controlled storage facilities if item requires it.
- 4. Priority review of PQDRs and SDRs for hazardous and nonhazardous materiel in that order.
- 5. Priority handling of inspection/testing requirements for shelf-life hazardous and nonhazardous materiel in that order.

4-7. PACKAGING

- A. Packaging of shelf-life items shall be accomplished in accordance with AR 700-15/NAVSUPINST~4030.28/AFJMAN~24-206/MCO~4030.33B/DLAR~4145.7.
- B. In the management and storage of shelf-life items, ICPs shall be alert to the fact that improved packaging may prolong the shelf life of items. Current and future packaging technology should be explored by the ICP to obtain a longer shelf-life. Priority shall be placed on hazardous shelf-life items. Modifications will meet the requirements of Code of Federal Regulations Title 49 (CFR Title 49). SAs will ensure that packaging materiels, which are essential to maintaining item integrity, are not removed from the item while in storage.

4-8. <u>INVENTORY MANAGEMENT</u>

A. Requirements and Stockage Criteria

- 1. As a first choice Inventory Managers (IMs) shall make maximum use of Direct Vendor Delivery(DVD), Electronic Commerce (EC), Requirements Contracts and Prime Vendor (PV). Additional emphasis will be placed on hazardous items. Chapter 5, paragraph 5-1.H, provides a description of the EC and PV concepts. Source capabilities shall be included in the above acquisition techniques.
- 2. Wholesale shelf-life items will be positioned only at Primary Distribution Depots and only those assets required to support maintenance functions will be collocated with the maintenance activities. Maximum use shall be made of the contractors distribution system to reduce Government stockage.
- 3. IMs and retail requisitioners will maintain surveillance of shelf-life items and determine requirements to avoid having stocks on hand beyond the shelf-life expiration date. When determining requirements, take into consideration the shelf-life periods, the feasibility of rotating assets before their expiration dates, and the probability of extending the inspect/test dates.
- 4. System reorder points shall be recomputed at least semiannually, and shall be confirmed on the basis of the latest recorded demand each time the system reorder point level is reached; i.e., before initiating new procurement action.
- 5. The following specifies the maximum amount of materiel that may be stocked in wholesale systems. This may be adjusted for war reserve stocks.

a. Replenishment Items

1-12 MONTHS	DO NOT STOCK
13-18 MONTHS	5 MONTHS
19-24 MONTHS	6 MONTHS
25-36 MONTHS	9 MONTHS
37-48 MONTHS	12 MONTHS
> 48 MONTHS	15 MONTHS

of yearly demand (3 months) is considered prudent.

b. Numeric Stockage Objective (NSO) items shall be computed as follows:

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Stockage Objectives = 1/2 NSO quantity
Maximum Stockage Objective = 1/2 NSO quantity
Rotatable Quantity = NSO for shelf-life periods < 24 months
and = 1/2 NSO quantity for shelf-life periods = > 24 months.
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- c. The above criteria also applies to Military Service owned commingled stock being held by the IM for rotation purposes as well as other stocks stored at locations other than SAs.
- B. Excess Stock. When an IM perceives that on-hand shelf-life materiel will exceed the maximum rotatable quantity, it is the IM's responsibility to review the item's demand patterns, due-in quantities, stock-on-hand, customer ordering practices, and potential for extending Type II items to avoid having materiel expire. After potential excess quantities have been identified, customers should be given incentives ("discount" prices or free issue) to reduce inventories. In other cases, materiel may be offered for Humanitarian Assistance Programs after all legal ramifications have been considered. Retail users shall report excess on-hand quantities to the IM. Return of materiel to manufacturers for reimbursement or exchange and redistribution of assets as specified in paragraph 4-9, B and C will also be considered.

 C. Condition Code Migration. On-hand materiel that has migrated to condition code "B" will be applied against the total assets at a reduced level when considering a replenishment buy. Application of one quarter

4-9. WAR RESERVE PROGRAM.

Standard war reserve policy requires DoD Components at all echelons to ensure that shelf-life items held for War Reserve Programs are identified, rotated, and maintained in a ready-for-issue condition. The Military Departments have established programs to provide materiel with the maximum shelf-life; but there are other alternatives that can be pursued to prevent disposal of large quantities of shelf-life materiel. Some of these methods are:

- A. <u>Discounts and Free Issues</u>. The application of discounts or free issue to potentially expiring war reserve shelf-life materiel requires early identification, segregation, and active marketing of this materiel.
- B. Return of Materiel to Manufacturers for Reimbursement or Exchange. This involves communicating with manufacturers in an attempt to obtain new items in exchange or credit for those approaching the end of their shelf life, and trading the old items in at less than the new item's price.
- C. <u>Redistribution</u>. Redistributions may be made both within and among the Military Services or Agencies.
- D. <u>Defense Program for Redistribution of Assets (DEPRA)</u>. DEPRA is an established method of automatically screening excess Service materiel

through a broad customer base to assure the greatest reutilization of this materiel. DEPRA policy is contained in DoD 4000.25-1-S2.

- E. <u>DoD Industrial Base</u>. Industrial base considerations shall be made especially when an item is combat essential, military unique, has low peacetime/high wartime demand, limited production base and is a shelf-life item, e.g., chemical protective suits/gloves. In order to minimize the impact that these items have on supply support, the following strategies should be adopted:
 - 1. Investment in selected production equipment.
 - 2. Use of commercial substitutes when applicable.
- 3. Manufacturing technology programs to support "critical" technologies.
 - 4. Service contracts (e.g., maintenance agreements).
 - 5. Joint Military Service/DLA planning.

4-10. EXCEPTIONS TO FIRST-IN FIRST-OUT (FIFO) ISSUE

- A. Shelf-Life materiel generally will be issued on a First-In-First-Out (FIFO) basis. However, when there is a need to replenish war reserve materiel, the maximum shelf life is required and Last-In-First-Out (LIFO) practices can be used on an exception basis. Several adaptations have been developed for the Services. They are:
 - 1. Use of Advice Codes 2G, 23, 24, 29, or 31.
- 2. Use of Project Code MPS for U.S. Marine Corps Maritime Prepositioned Ships (MPS), Project Code MK4 for Navy life rafts, Project Code 3AA for Prepositioned War Reserve Materiel, and Project Codes beginning with M and P for war reserve and operational projects, respectively. This will allow shipment of newest materiel, but with no less than 24 months shelf life remaining on items with SLCs of 36 months or greater.
- 3. Use of Project Code 842, to allow shipment to Navy ships of materiel that has at least 1 year of shelf life remaining.
- 4. Issuing shelf-life items to satisfy requirements for stock (not immediate issue) originated by fleet units or overseas activities; and, it is known that condition code "B" stocks would have insufficient shelf life remaining.
- 5. When items are being incorporated in Components, Assemblies, Sets, Kits, and Outfits (CASKOs) or separately earmarked for CASKOs.
- 6. Use of Advice Code 7D is applicable to GSA-managed items only. When Advice Code 7D is used, GSA identifies the requisitions as a "request for DVD with price discounts and possible longer delivery time. Delivery from stock is acceptable if contract minimum order limitation is not met." In order to receive materiel under this process the requisition must meet the minimum order quantity established for the item and have an order value of at least \$300.
- 7. Use of Advice Codes 3C, 3D, 3E, 3F, 3G, 3H, or 3J will allow shipment of newest medical material with no less than 75 percent shelf life remaining to selected Prepositioned war reserve activities.
 - B. International Logistics Program (ILP) and Overseas Requirements

- 1. Items with an SLC of 24 months or greater, issued to satisfy either overseas or ILP requirements shall be in condition code A, with a minimum of 12 months shelf life remaining. Requisitioners may waive the 12-month minimum by submitting exception requisitions. Items with an SLC of less than 24 months are not subject to the 12-month minimum. However, they must be issued from condition code A assets, unless the customer specifies that other than condition code A materiel is acceptable. OCONUS requisitions may be identified by Document Identifier Codes (DIC) A01, A02, A03, A04, or A05 in record position 1-3 of the requisition. ILP requisitions are identified by the following MILSTRIP Service Codes in RP 30: B (Army FMS), D (Air Force FMS), K (Marine Corps FMS), P (Navy FMS), or T (DLA FMS).
- 2. In addition to the above, ILP requisitions will be issued in accordance with Last-In First-Out (LIFO) policy. LIFO issue of Type I shelf-life items will be accomplished by issue of materiel with the most current date of expiration; Type II items will be issued by the most current date of manufacture, cured, assembly, or date packed (subsistence only) regardless of extensions.
- 3. For Air Force managed items, Condition Code B materiel may be issued for priority 01-08 Air Force FMS requisitions.

4-11. SHELF-LIFE CONDITION CODES AND RELATED MATERIEL ISSUE POLICY

- A. Shelf-Life items shall be identified on appropriate accountable records by the supply condition codes indicated in Appendix B.
- B. Materiel will be issued strictly on a FIFO basis except when LIFO is authorized by this Manual. The oldest stock within the condition code will be issued before newer stocks.
- C. Condition code changes received from the SAs will be promptly processed to update the accountable record.

D. DoD Components shall apply MILSTRAP supply condition codes prescribed in Appendix B and in accordance with the following table:

When Shelf Life	Assign Supply Condition Code	
Remaining is:		
Less than 3 months	"C" IM shall contact the customer prior to issue of materiel (Applies only to CONUS customers)	
3 through 6 months	"B" (restricted issue) DLA issues B condition materiel to CONUS customers.	
More than 6 months	"A" (Unrestricted issue)	

E. Exceptions

- 1. When directed by the ICP, items assigned a shelf-life code of 12 months or less may be maintained in condition code "A" for a specific period other than for those periods shown above. These items shall be isolated, and close surveillance maintained by the ICP and the SA to ensure items are issued prior to the expiration date. These items should be screened to ensure that indefinite delivery type contracts, DVD, or EDI are used, as appropriate.
 - 2. For materiel managed by the DSCP-Medical:
- a. Condition code "C" materiel is issued to CONUS customers on priority designator 01-03 requisitions when the materiel has less than 90 days of shelf life remaining. However, for that condition code "C" materiel with less than 30 days shelf life remaining, customer concurrence is required.
- b. SAs shall ship materiel that has at least 9 months shelf life remaining if the customer is located overseas.
- 3. The Air Force wholesale system issues condition code "C" materiel to Air Force CONUS activities if the priority designator on the requisition is 01 through 08.
- 4. The shelf-life condition codes in subparagraph D, above, do not apply to nuclear ordnance. Compliance with the nuclear weapons reliability concept requires that items for reserve use need special testing or DoE control for quality assurance. These items are available only from DoE through the Field Command, DSWA, and shall be managed in accordance with the provisions of DOE-DNA TP 100-1. Shelf-life extension information shall be accomplished in accordance with the provisions of DoE-DNA TP 35-51A.
- 5. For GSA materiel, internal controls have been established to ensure that no item is shipped from GSA facilities if less than the minimum time indicated below remains:

Shelf-Life	CONUS	<u>Destination</u> Overseas <u>Surface</u>	Overseas Air
1 year or more		1/2 original shelf	-life
9 months 6 months 3 months	4 months 2 months 1 month	4 months 3 months N/A*	4 months 2 months 45 days

* Items with a 3-month shelf-life must be shipped overseas only by air transportation.

F. Non-Issuable Materiel

- 1. When shelf-life materiel is placed into a non-issuable condition; i.e., condition codes other than A, B, or C, the IM shall ensure that this materiel is expeditiously returned to an issuable condition. Expeditious processing shall be performed to ensure that materiel does not expire while it is in the non-issuable condition. Hazardous shelf-life items shall be processed before nonhazardous shelf-life items.
- 2. The maximum timeframes in which materiel may be suspended while in condition codes J, K, or R, are specified in DoD 4000.25-2-M, and are as follows:

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Supply Condition Code J - 90 Days
Supply Condition Code K - 10 Days
Supply Condition Code R - 180 Days
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Every effort should be made by all parties to decrease these timeframes for shelf-life items.

- 3. If the materiel is in condition code "L," the following actions shall be taken after the litigation is resolved:
- a. For the materiel that is expired, replacement materiel shall be obtained from the contractor.
- b. If the materiel has less than 6 months shelf-life remaining, replacement materiel shall be obtained from the contractor unless the materiel can be issued to a customer who agrees to accept the less than 6-month shelf-life remaining materiel.

4-12. MATERIEL RETURNS

- A. The following applies to reports of customer excess of shelf-life items:
- 1. DoD Component ICPs shall adhere to the MILSTRIP MRP when processing reports of customer excess. Shelf-Life items will be reported and returned in a ready to issue condition. Expired shelf-life materiel or items having less than 3 months shelf-life remaining will not be returned unless authorized by the managing ICP. Type II shelf-life items shall be extended prior to return with the DD Form 2477, Shelf-Life Extension Notice.
- 2. Medical and perishable subsistence items are not authorized for return.
- 3. Reimbursement shall be in accordance with DoD Regulation 4140.1-R.
- 4. Reporting of excess materiels to ICPs shall be IAW DoD Regulation 4140.1-R.

B. Excess/Disposal

1. IMs are responsible for screening materiel excess to their needs throughout DoD prior to turn-in of the excess materiel to a Defense Reutilization and Marketing office (DRMO). Turn-in of excess shelf-life items and disposal of shelf-life items shall be in accordance with the provisions of DoD 4160.21-M.

- 2. When excess (serviceable/unserviceable) materiel migrates to supply condition codes J, K, L, M, N, P, Q or R, activities must initiate action to reclassify the materiel to an acceptable supply condition code (i.e., A through H) before preparing the turn-in document DD Form 1348-1A, Issue Release/Receipt Document or DD Form 1348-2, Issue Release/Receipt Document with Address Label. Paragraph 5-2, of DoD b4160.21-M, contains the materiel reclassification procedures.
- 3. In order to ensure that shelf-life items are properly disposed of, and the "DoD Shelf-Life Management Report" contains accurate information, include the following entries in the DD Form 1348-1A, or DD Form 1348-2, Disposal Turn-In Document:
- a. Management Codes in record position 72 to include management code "T" for shelf-life material which has expired or cannot/will not be extended.
- b. Block 27 of the DD Form 1348-1A with the phrase "Shelf-Life Property."
 - c. Block 15 of the DD Form 1348-1A will contain the SLC.
- 4. Once shelf-life items are considered excess and disposal action is required, expeditious action will be taken to process these items to the DRMO. This is recommended because some states, under their environmental laws, consider the expiration of shelf-life for hazardous materiel as the point where these items become hazardous waste. Since many of the items in the DoD Shelf-Life Program are considered hazardous there is the potential to incur additional environmental problems and generate additional handling costs for hazardous waste.
- 5. Excess medical and perishable subsistence shelf-life items are not authorized to be returned to the SAs.

4-13. BASE CLOSURES.

Following public announcement that a base will be closed, the supply activity will implement a time-phased process to reduce and subsequently ship out, or turn-in to DRMO, all stocks of shelf-life items. These actions will be in consonance with the closure plans of the Components and shall occur prior to the closure date.

4-14. COMPONENT, ASSEMBLY, SET, KIT, AND OUTFIT (CASKO).

CASKOs containing shelf-life items having the same or different expiration dates, or inspection/test dates shall comply with the following policy:

- A. Assign and mark the CASKO with the SLC reflecting the shortest shelf-life period of all the shelf-life items contained in the CASKO.
- B. Assign and mark the CASKO expiration or inspect/test date with the earliest expiration date or earliest inspect/test date of all of the shelf-life items in the CASKO.
- C. Maintain a packing list or other control document listing the shelf-life items, shelf-life periods or codes, and the expiration or inspect/test dates.
- D. If an item, or items, within a CASKO reaches its expiration date or inspection/test date, do not issue the CASKO until all expired items are replaced with issuable condition coded materiel or the items are

tested or inspected (Type II materiel) and brought back to issuable condition codes. Place non-issuable CASKOs in condition code "E" or "G."

- E. Do not dispose of CASKOs when the CASKO or an item within that CASKO reaches its expiration or inspection/test date unless the IM specifically directs disposal action.
- F. At the option of the Military Service or Agency, shelf-life items may be packaged and stored separately from the CASKO to facilitate the rotation of shelf-life materiel.

4-15. REPAIR OR OVERHAUL.

If an item is repaired or overhauled, and the item or component controlling shelf-life in that reparable is replaced, a new shelf-life period must be established for the item that is being repaired or overhauled.

4-16. FINANCIAL ACCOUNTING.

Reduction in inventories due to losses sustained from the expiration of shelf-life items shall be accounted for in the financial records of the accountable officer. Transactions shall be identified and recorded in general ledger accounts in accordance with DoD 7220.9 M.

4-17. SHELF-LIFE MANAGEMENT REPORT

- A. An annual (31 December) Shelf-Life Management Report shall be prepared in the format depicted in Appendix C. Report statistics are extracted from the end of the annual period. The report shall be submitted by the Service/Agency Shelf-Life administrators to the DoD Shelf-Life Program Director 30 days after the annual output dates. The reporting requirements for the report have been assigned Report Control Symbol (RCS) DD-A (L)(A)1549. The report shall be distributed to all responsible DoD officials including, as a minimum, the Service/Agency administrators and the ICP shelf-life focal points and the major operating commands.
- B. There are two parts to the report. Part I shall be prepared by DoD Components, excluding the Defense Special Weapons Agency (DSWA) and shall contain the following information for consumable and nonconsumable materiel in wholesale storage:
- 1. By ICP, FSC, Military Service, and Agency, the number of NSNs and dollar value inventory of shelf-life items managed. Dollar value of inventory throughout Part I represents the total dollar value of shelf-life on hand assets in condition codes A, B, C, D, E, F, G, K, L, and J.
- 2. By ICP, FSC, Military Service and Agency, the total number of NSNs and dollar value inventory added and deleted from the shelf-life program since the last report. Additions include items that are now in the supply system and are assigned SLCs and new shelf-life items entering the supply system. Deletions include items that have been totally deleted from the supply system and items that are deleted only from the shelf-life program.
- 3. By ICP, FSC, Military Service, and Agency, the net change in the number of NSNs and dollar value inventory.
 - 4. The ICP, Military Service, and Agency totals and grand totals.
- 5. Remarks, if applicable. For example, if a particular Military Service or Agency has a significant increase in the number of NSNs or dollar value inventory, this shall be included in the remarks.

- C. Part I of the report shall be used as a basis for determining the following:
 - 1. The ICPs responsible for the management of shelf-life items.
- 2. The number and dollar value of items in the program at a given point in time; i.e., the baseline.
 - 3. The program's stability or direction.
 - 4. The characteristics of shelf-life items.
 - 5. The commodities or FSCs requiring special attention and action.
 - 6. Any other purpose deemed necessary by the DoD Component.
- D. Part II of the report shall be prepared by the Defense Reutilization and Marketing Service (DRMS) and forwarded to the Military Service and Agency shelf-life focal points. It will contain the following information for both consumable and nonconsumable shelf-life items:
- 1. By ICP, FSC, Military Service and Agency, the number of NSNs and dollar value of wholesale disposals. This category includes disposal for expired shelf-life items and disposal for extendible shelf-life items that failed the inspection or test. These items are identified by Management Code T.
- 2. By turn-in Military Service, Agency and FSC, the number of NSNs and dollar value of retail disposal. This category includes disposal for all shelf-life items and disposal for expired shelf-life items which are identified by Management Code T.
- 3. By FSC, Military Service and Agency, the number of NSNs and dollar value of shelf-life items utilized by DoD.
- 4. By FSC, the number of NSNs and dollar value of shelf-life items transferred to non-DoD Agencies.
- 5. The number of NSNs and dollar value of shelf-life items donated, sold, abandoned/destroyed, or downgraded to scrap by the DRMO. All other dispositions of shelf-life materiel will also be listed.
- $\,$ 6. DoD Component totals and grand total for each of the above categories.
- 7. Remarks, if applicable. For example, if a significant amount of shelf-life materiel were disposed of, and the materiel is held for war reserves and not issue purposes, the DoD Components will include this in the remarks.
 - E. Part II of the report will be used as a basis for determining:
- 1. The volume of shelf-life items entering the disposal program in terms of number of items and dollar value of materiel.
- 2. The shelf-life FSCs or commodities requiring specific attention or action.
- 3. Whether disposal volume for shelf-life and shelf-life hazardous items is proportionately less than, equal to, or greater than disposal volumes for other than shelf-life items.

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 m The\ organizational\ level}$, ICP, or retail activity generating the disposal action.
- 5. The shelf-life disposal program's stability or direction (trends).
 - 6. Any other purpose deemed necessary by the DoD Components.
- 7. In performing the above analysis emphasis shall be placed on the review of hazardous shelf-life disposal.

CHAPTER 5

ACQUISITION OF SHELF-LIFE ITEMS

5-1. GENERAL

- A. Shelf-Life replenishment and stockage policy requires that a minimal number of shelf-life items be managed by an ICP. Shelf-life acquisition policy requires that a minimal number of items be procured for wholesale storage.
- B. Procurement documents, contractual clauses, specifications, materiel standards, and purchase descriptions for shelf-life items shall be tailored to the product sought and shall include essential requirements to ensure:
- 1. Dating and marking in accordance with MIL-STD-129 or for the GSA and other Federal Agency materiel, FED-STD-123. For FSC 9150, MIL-STD-290 markings also apply.
- 2. Environmental protection including levels of preservation and pack, transportation and storage.
- 3. A minimum of 85 percent (allowing for rounding to whole months) shelf life remaining at time of receipt by the first Government activity. The receiving activity (i.e., wholesale storage activities or users, are responsible to ensure that 85 percent shelf-life remains. Deliveries from contractors not having at least 85 percent shelf life remaining shall be considered nonconforming. Refer to Appendix A for the amount of shelf-life remaining for the corresponding shelf-life codes.
- 4. Transportation and storage services that provide environmental conditions necessary to prevent and/or reduce deterioration.
- C. Commercially available items having a shelf-life of 12 months or less will have a contractual agreement that will provide for the greatest support and maximum utilization of the contractor's distribution system. Indefinite delivery contracts are preferable, allowing orders to be placed either directly by users, or through centralized procurement with delivery directly to the user. These items will not be centrally stocked. They will be procured through a centrally awarded contractual agreement, or a multiple award Federal Supply Schedule which permits using activities to place orders directly on vendors for direct delivery to the user. A concerted effort shall be made to procure all hazardous shelf-life items in this manner. Surge requirements shall be included in all contractual agreements of this type. On a limited basis GSA will stock items with 12 months or less shelf life for customers who require smaller quantities or faster delivery than DVD.
- D. Government Agencies shall encourage industry to develop items with increasing shelf-life periods and develop items which are nonhazardous or less hazardous, and ensure that newly developed items do not affect health, safety, welfare, or mission capability and readiness. The length

of the shelf-life guaranteed by the manufacturer in conjunction with the unit cost and quantity to be purchased are parameters which should be considered during the procurement solicitation phase.

- E. Environmental considerations require procurement activities to provide contractual incentives to contractors who provide products that can be recycled, or can be stored for extended time periods. Procurement considerations shall include acquisitions of nonhazardous items in lieu of hazardous items where possible. Emphasis will be given to those items having hazardous properties. It is imperative that these procurement activities also maintain applicable statistics on contractors in these categories to provide data on potential cost avoidance.
- F. Government Agencies will coordinate with industry to develop items with minimal or no hazardous properties and to obtain the maximum shelf life.
- G. Maximum use of DVD, requirements contracts, Prime Vendor (PV) and Electronic Commerce (EC) will be accomplished where possible when procuring shelf-life items with special emphasis on hazardous shelf-life items. Federal Acquisition Regulation (FAR), subparagraph 16.5, contains requirements contract guidelines.

H. Electronic Commerce (EC)

- 1. EC is a computer link-up between Government and industry (or intercompany/intracompany)which uses industry standards and business data to rapidly and efficiently satisfy military purchase orders for commercial type items directly from vendor maintained inventories. Emphasis will be placed on the use of EC for the procurement of shelf-life items.
- 2. EC applications provide faster contract processing and vendor payment, more accurate records, reduced ordering time, smaller inventories, improved asset visibility, more effective quality control and better customer service.
- 3. On EC acquisitions, all Type I items shall be marked as a minimum with the date of cure/manufacture/assembly and expiration date; all Type II items shall be marked as a minimum with the date of cure/manufacture/assembly and inspection or test date. These minimum requirements exclude film. Film may be marked with a "use by" date in lieu of an expiration or inspect/test date. "Use by" dates may also be assigned to batteries or other items so designated.

I. Prime Vendor (PV)

- 1. PV transfers the storage and distribution functions of the supply system to a commercial distributor who is responsible for the warehousing and rotation of shelf-life materiel as well as non-shelf-life materiel.
- 2. The PV awards all subcontracting contracts and processes replenishment requisitions that have been screened through the ICP.
- 3. PV was initiated to reduce inventories and improve customer satisfaction. Other benefits include lower prices on wholesale/retail items, 24-hour delivery possibility, electronic payment of invoices, a broader range of items, and a significantly smaller surcharge for the customer.
- 4. PV medical contracts require that shelf-life materiel have at least 6 months shelf life remaining in lieu of 85 percent remaining at time of receipt by the Government. This is in keeping with industry

practices for commercial distribution since the medical facility will order only a few days worth of materiel at a time and frequent deliveries by the PV allow the facility to maintain a very limited inventory. The rapid turnover of materiel makes 6-month shelf life an acceptable level which fully meets medical customer requirements for peacetime operations.

- J. Unless authorized, shelf-life items will not be procured through local purchase unless the items are to be used for immediate consumption.
- 1. Immediate consumption is defined as that material which will be used within 60 days of the local purchase date.
- 2. Shelf-Life materiel shall not be acquired through local purchase unless MIL-STD-129 or FED-STD-123 shelf-life markings are required.
- K. Chapter 5 policies apply to all procurement activities and the Defense Contract Management Command (DCMC).

5-2. CONTRACTOR MARKING REQUIREMENTS.

Shelf-life items will be marked for identification and control. Markings shall be shown below the item identification data on all unit, intermediate, and exterior packs or unpacked items, shall be IAW MIL-STD-129, MIL-STD-290 (FSC 9150 only), or FED-STD-123, respectively, and will include the following:

- A. For Type I shelf-life items: apply one, as appropriate; date manufactured, date cured, date assembled, or date packed (subsistence only); and expiration date.
- B. For Type II shelf-life items: apply one as appropriate; date manufactured, date cured, date assembled, date packed (subsistence only), and inspect/test date.
- C. For both Type I and Type II markings in subparagraphs A and B, above, the date shall be expressed by the numeric month and the last 2 digits of the calendar year; i.e., 06/95, with the day of that month being the last day. For cure dated items, the date cured, date assembled, expiration date, or inspect/test dates shall be expressed by the calendar quarter i.e., 2Q95, with the day of that quarter being the last day.
- D. When two or more unit packs of identical items bear different dates of manufacture, dates of cure, dates of pack, or dates of assembly, the earliest date shall be shown on the shipping container.
- E. For Type I drugs and biologicals, the expiration date only is required. The expiration date should be marked in accordance with Federal Specification PPP C-186. Manufacturer date shall not be shown for medical items having expiration dates.
- F. It will be emphasized that contract number will be included on all unit, intermediate, and shipping containers for shelf-life items whether using MIL-STD-129, MIL-STD-290 (FSC 9150 only), or FED-STD-123, for marking.

CHAPTER 6

DEPOT STOCKAGE OF SHELF-LIFE MATERIEL

6-1. GENERAL

- A. Wholesale shelf-life items will be positioned only at Primary Distribution Depots and only those assets required to support maintenance functions will be collocated with the maintenance activities. Maximum use shall be made of the contractor's distribution system to reduce Government stockage.
- B. A minimum number of storage locations will be identified for each item; however, all stock at one storage location will have identical cure, manufacture, assembly, pack, and expiration date or inspect/test date.
- C. ICPs will develop and promulgate test, restoration, and storage standards required to ensure protection of materiels which deteriorate in storage during the period of normal stock turnover. Storage standards will be prepared and accessed by using the MQCSS database. ICPs and wholesale managers are responsible for furnishing test data on Type II NSNs requiring lab testing to the DoD QSL database. Instructions for access are available from the DOSO, DSN 695-5212/4224/3380 or commercial (804) 279-5212/4224/3380. SAs will use the storage standards to maintain materiel in an issuable condition.
- D. ICPs shall advise SAs of items having shelf-life application or changes through the catalog change reporting system.
- E. Within DoD, shelf-life items shall be identified on storage locator records by SLCs set forth in Appendix A and applicable supply condition codes set forth in Appendix B.
- 1. Items will be identified in storage location records within condition codes, by either the date manufactured, date cured, date packed (subsistence only), or date assembled (apply one as appropriate), and date of expiration (Type I), or by the date manufactured, date cured, date packed (subsistence only), or date assembled (apply one as appropriate), and inspect or test date (Type II).
- 2. The SA will initiate action to reconcile all locator records whenever an SLC/condition code discrepancy occurs between the SA records and ICP records. This shall be accomplished by processing a change of condition code DIC "DAC," or a DD Form 1225, Storage Quality Control Report, if applicable, and related documents, to the managing ICP. Changes in condition codes will be made expeditiously.

F. DoD Quality Status List (QSL)

- 1. DLA outputs the DoD QSL to provide extension information on Type II Shelf-Life items.
- 2. The DoD QSL contains the results of tests by DoD and GSA physical science laboratories to determine if Type II shelf-life materiel may continue to be used. Test samples are selected from materiel stored according to requirements outlined in the appropriate storage standard or manufacturers' recommendations.
- 3. One important consideration before using the DoD QSL is to ensure that the stock is stored as required by the MQCSS or manufacturer's recommendation.
- 4. The DoD QSL is used to extend the Test Date or condemn all local property on hand with the same NSN, contract number and manufacturer's lot/batch number. The use of the QSL test results are

mandatory provided that materiel is stored as required by the MQCSS or manufacturer's recommendations. Additional local tests may be used to extend or condemn material if the application of the item is critical and its failure could cause the item to which it is applied to fail, or there is a probability of injury or adverse health to personnel, damage to property, or other effects such as violation of legal requirements. Local tests may also be used when quantities warrant and if the loss of the item would cause a line stoppage. Local tests will not be published on the OSL.

5. DSCR will provide the QSL on a monthly basis, on hardcopy or microfiche, as a courtesy to U.S. Government Components. Activities desiring to be placed on distribution list for the QSL may write or call:

> Defense Supply Center Richmond ATTN: DSCR-RZS 8000 Jefferson Davis Highway Richmond, VA 23297-5000 DSN: 695-4140 Comm: (804) 279-4140

On-line access to the DoD OSL is available. Instructions for access are available from the DOSO on DSN 695-5212/5224/3880 or commercial (804) 279-5212/5224/3880.

- 6. The following data elements are shown on the OSL:
 - a. National Stock Number (NSN). NSN of item tested.
- b. Contract Number. Contract number of item tested. For Air Force retail stock tested by Air Force Labs "AF Retail Stk" along with the date of manufacture, e.g., 1096, will be displayed.
 - c. <u>Lot/Batch Number</u>. Lot/batch number of item tested.
 - d. Nomenclature. Standard nomenclature of item tested.
- e. Specification. Military, Federal, or other specification which applies to the NSN tested.
- f. <u>Last Test</u>. Month and year (MMYY) e.g., January 1995 = 0195 (NOTE: Date fields will be changing to six digits to reflect the year 2000 and beyond (MMYYYY)).
- g. $\underline{\text{Test Due}}$. Month and year of the next test date (MMYY), e.g., January 97 is 0197.
 - h. Condition Code (CC). MILSTRAP condition codes A, C, or H:
 - A Condition Usable for all Service/Agencies
 - C Condition Usable only for those Military Services listed in the "Issue to" column.
 - H condition Materiel is not usable (condemned) and must be disposed of in accordance with existing regulations.
- i. Issue To (ISS To). Identifies the Military Service users that may use the Condition Code C materiel.
 - j. IMM. Identifies Source of Supply for the NSN.
 - k. <u>Failure Codes</u>
 - A CONDITION IN CONTAINER V WATER REACTION
 - APPLICATION PROPERTIES
 - W HOMOGENEITY X CONTAMINATION C TACK FREE TIME

D CURE RATE Y FLASH POINT E HARDNESS (DUROMETER) Z STORAGE CONDITION F ADHESION AA IR SPECTROSCOPY G OVERLAP SHEAR BB CONDUCTIVITY H PEEL CC FLOW OR SAG (TIME) Ι FLEXURE DD CORROSION J TENSILE EEFLUID RESISTANCE K DRYING PROPERTIES FFIMPACT FLEXIBILITY POT LIFE GG HEAT RESISTANCE L Μ VISCOSITY HH ORDER II COATING ANCHORAGE Ν 0 DENSITY JJ LOW TEMP PROPERTIES Ρ REMOVAL POWER KK TOTAL SOLIDS LL LOCKING TORQUE Q GLOSS BRUSHING PROPERTIES MM STATIC SHEAR R S FOAMING STRENGTH Т FINENESS OF GRIND NN REFLECTANCE OO MISCELLANEOUS U LEAD CONTENT

l. $\underline{\text{Laboratory Code}}$. Identifies the laboratory performing the test.

m. <u>Laboratory Report Number</u>. The number assigned by the laboratory that performed the test and used by the laboratory for internal control. **NOTE:** Lab Codes and Laboratory Report Numbers should also be included on products in condition code H. This assists in identifying the nature of the failure on the product being disposed.

n. <u>Shelf-Life Training</u>. Shelf-life training which includes training on use of the MQCSS and QSL is available from DOSO, DSN 695-5212/5224/3380.

6-2. RECEIPT

- A. Receiving activities shall ensure that materiel received from new procurement contains:
- 1. MIL-STD-129, MIL-STD-290, or FED-STD 123, (GSA and other Federal Agencies) marking requirement.
- 2. A minimum of 85 percent shelf-life remaining at time of receipt by the first Government activity. Refer to Appendix A for the 85 percent requirement.
- 3. Materiel not containing the above shall be considered nonconforming, suspended in condition code "L" and shall be reported to the ICPs or corrected locally.
- B. Materiel shall be forwarded to the proper storage location, e.g., general storage, the correct hazardous materiel warehouse and location or controlled temperature warehouse.
- C. If non-shelf-life materiel having shelf-markings is received, the receiving activity shall verify the code with the ICP shelf-life focal point.
- 1. If the ICP determines that the item is shelf-life and corresponds to the code of the materiel received, the ICP shall update the FLIS record and any other applicable records to reflect the correct SLC.
- 2. If the ICP determines that the item is not shelf-life, the ICP shall provide the receiving activity with disposition instructions. In this case, consideration must be given by the ICP as to whether the item was previously a shelf-life item, but was removed from the shelf-life program because of an improved materiel and/or product. In this case,

the old item would still be marked as shelf-life, but the new item would not be marked as shelf-life.

6-3. STORAGE

- A. Storage personnel will ensure that materiel is stowed in the correct location, e.g., general storage, hazardous, or controlled temperature warehouse.
- B. Shelf-life items will be stored in separate locations by NIIN and by date manufactured, date cured, date assembled, date packed (subsistence only) and expiration date (Type I); or by NIIN and by date manufactured, date cured, date assembled, date packed and inspect or test date (Type II). Shelf-life items shall be stored with one lot/batch per storage location. Although this is the preferred method of storage, a lack of storage space could neccessitate a need to store multiple lots per location. When this occurs, each lot/batch within the location shall be identified with a placard.
- C. Storage personnel will provide necessary surveillance to ensure that items are in a ready-for-issue condition in accordance with applicable storage standards or other appropriate technical documentation, to include exercise of manufacturer or contractor warranty provisions, if applicable.
- 1. Storage standards will be prepared by the ICP and made available to the appropriate DoD and GSA wholesale and retail SAs. The SAs shall use the storage standards in order to perform their inspections or tests of shelf-life items. Storage standards shall be used only if the materiel is stored under the proper facility characteristics (type of storage) as specified in the MQCSS. If materiel is stored in other than the prescribed facility characteristics or type of storage, the inspection or test frequency will be increased accordingly or the item condemned.
- 2. Additional inspections or tests may be used to extend or condemn property if the application of the item is critical and its failure could cause the item to which it is applied to fail, or there is a probability of injury or adverse health impact to personnel, damage to property, or other effects such as violation of legal requirements. Local inspections or tests might also be used if quantities warrant or if the loss of the item would cause a line stoppage.
- D. Storage personnel in the normal routine of surveillance shall be alert to expired materiel or materiel about to expire and shall notify the ICP of expired stocks for which storage standards or other technical data are not available.
- E. SAs shall provide for condition code downgrading of shelf-life items as follows:
- 1. For Type I (nonextendible) shelf-life items, materiel shall be downgraded from condition codes A to B to C to H in accordance with the Appendix B condition code timeframes.
- 2. For Type II (extendible) shelf-life items, materiel requiring visual inspection shall be inspected 6 to 7 months prior to the inspection test date. Materiel requiring lab testing shall be tested 9 months prior to the inspect/test date; i.e., while it is still in condition code A. Prior to testing, the DoD QSL shall be checked to determine if the item has been extended. For materiel requiring lab testing which is stored at a retail facility, the storage activity will submit an SDR to the item manager requesting disposition instructions.

Based on the results of the inspection or test, the following actions will be taken:

- a. When the materiel is inspected or tested and passes the inspection or test, a new inspect or test date and appropriate condition code shall be applied based on the inspection or test results. Materiel will be extended from the inspect or test date.
- b. If the materiel cannot be tested while it is still in condition code A, e.g., materiel awaiting disposition instructions from the IM or awaiting laboratory test results, this materiel shall be allowed to migrate to condition codes B, C, or J, until the disposition instructions or laboratory test results are received. When the disposition instructions or laboratory results are received, the materiel shall be taken into the appropriate condition code.
- c. Type II nonconsumable items which require repair or overhaul, in addition to testing, shall be placed in condition code "E" if the SA has the capability to repair the item and condition code "F" if it requires a Maintenance Activity to accomplish a major repair and/or overhaul. Under no circumstances will these condition codes be used for a nonconsumable item which is required only to be tested.
- d. The downgrade policy for Type II items does not apply to those items with a shelf-life period of 12 months or less and to DLA-managed subsistence items. For these exceptions, local inspection or test and downgrade procedures apply.
- e. During the above downgrade criteria (including DLA exceptions) storage standards shall continue to be applied, DIC "DAC" shall continue to be submitted, materiel shall continue to be segregated and placarded; e.g., condition code placarding, and other normal practices associated with condition code downgrading shall continue to occur.
- f. The Type II downgrade policy also applies to shelf-life items which are being inspected or tested for a second, third, etc., time.
- g. After Type II shelf-life materiel is inspected or tested and then extended to a new inspection or test date, a Shelf-Life Extension Notice (Appendix F, DD Forms 2477 series, Extended Shelf-Life Labels) shall be attached in a conspicuous place at the storage location. Extension labels shall be attached to all exterior, intermediate, and unit containers prior to shipment. When resources are not available at the storage activity to apply extension labels to unit and intermediate packages, a sufficient number of preprinted labels shall be placed inside a packing envelope and attached to the number one shipping container. The envelope shall be plainly marked to indicate that shelf-life shipping labels are enclosed. Upon receipt of the shipment it becomes the receiver's responsibility to label packages not already labeled. There are three different sized extension notices, hereafter referred to as the largest, intermediate and the smallest. The form sizes are 8" x 11", 3" x 5", and 1"x 3", respectively. Forms may also be produced in rolls. The forms shall be used as follows:
 - (1) All entries shall be completed.
- (2) For materiel in bulk storage, the largest shelf-life extension notice shall be placed in front of the storage location.
- (3) On shipments of unit load quantities which contain the same product; e.g., pallets, the extended shelf-life notice shall be securely attached to two sides of each unit load. When shrink/spin/stretch wrap is used, the form shall be inserted under the

shrink/spin/stretch wrap. For these shipments the largest form is required.

- (4) On shipments of unit load quantities which contain more than one product, and on less than unit load quantities, the largest or intermediate DoD extended shelf-life notice shall be attached to each individual shipping container.
- (5) For Type II materiel in bin storage, the smallest or intermediate Appendix F notice shall be displayed at the location. Where extended shelf-life items are shipped from the bin, the extension notice shall be placed on this materiel.
- (6) The DD Forms may be locally produced, are available through the DoD QSL system, and may be modified to adapt to the extended product, e.g., made larger or for drums, cylinders, canisters, the revised extension information shall be stenciled on this material or other appropriate marking means shall be used.
- (7) Once the Type II materiel is received, it becomes the receiver's (i.e., retail, end user) responsibility to inspect the materiel and ensure that extension information is available and submit an SDR if information is not current and not available in the QSL. Subsequently, the receiver will ensure that extension markings are current and remark accordingly.
- (9) The DD Form 2477 series shall not be used for medical materiel extended under the DoD or FDA shelf-life extension program or the DoD shelf-life expansion program.

6-4. ISSUE

- A. Stock selected for issue will be the supply condition code specified by the Materiel Release Order (MRO).
- B. Materiel will be issued on an FIFO basis and shall be the oldest within the condition code specified. In order to issue the oldest materiel, Type I items will be issued by the earliest date of expiration; Type II items will be issued by the earliest date manufactured, earliest date cured, earliest date packed, or earliest date assembled (apply one, as appropriate). Exceptions to this procedure are authorized when conditions listed in Chapter 4, paragraph 4-10, of this manual are met.
- C. Block 15 of the DD Form 1348-1A, DoD Single Line Item Release/Receipt Document, contains the SLC of the item shipped. Materiel issued is properly marked with appropriate shelf-life data. Markings shall be shown below the item identification data on all unit, intermediate, and exterior containers, shall be in accordance with MIL-STD-129, MIL-STD-290 (FSC 9150 only) or FED-STD-123, and shall be retained during shipment.
- D. DoD wholesale storage activities will ensure that all shelf-life materiel meets the requisitioners' requirements which includes proper stock selection and correct packing, marking and labeling prior to release from the depot.

6-5. DISPOSAL

A. Shelf-Life item assets that are potential excess with 6 months or less shelf-life remaining shall be subject to accelerated issue or disposal procedures by the ICP to realize the maximum usage prior to expiration of shelf-life. Retail excesses shall be expedited through accelerated processing.

B. DoD Component ICPs shall adhere to the MILSTRIP Materiel Return Program (MRP) when processing reports of customer excess. ICPs must ensure that only stock with the greatest remaining shelf-life is accepted for return. This is required to ensure that shelf-life items are not subjected to restricted issue for disposal upon reentry to the wholesale level.

CHAPTER 7

MANAGEMENT OF HAZARDOUS SHELF-LIFE MATERIELS

7-1. GENERAL

- A. The purpose of this chapter is to provide an overview of Hazardous Materiel/Hazardous Waste (HAZMAT/HW) management, and to provide specifics of DoD's Hazardous Materiel Control and Management (HMC) program. See DLAM 4145.11/TM 38-410/NAVSUP PUB 573/AFJMAN 23-209/MCO P 4450.12, for storage and handling of hazardous materiels.
- B. Personnel involved in the management, storage, and use of shelf-life materiel shall be committed to ensuring that the generation of HW is eliminated or minimized through pollution prevention initiatives and effective management and storage practices. This includes source reduction techniques, use of alternative materiels and processes, recycling and proper and/or variable assignment of units of issue during the initial acquisition process.
- C. Section 2 of the Pollution Prevention Act establishes the following pollution prevention hierarchy as a National Policy declaring that:
- 1. Pollution should be prevented or reduced at the source whenever feasible.
- 2. Pollution that cannot be prevented should be recycled in an environmentally safe manner whenever feasible.
- 3. Pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible.
- 4. Disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner. The first option is preferred as a true pollution prevention practice. However, any change to procedures or processes which would move waste management practices up the pollution prevention hierarchy is assumed to yield environmental benefits and should be evaluated.
- D. References to effective management, storage and use of hazardous materiels are contained throughout this manual.

7-2. HAZARDOUS MATERIEL (HAZMAT) IDENTIFICATION

- A. Hazardous Materiel (HAZMAT). The definition set forth in FED-STD 313, identifies regulated HAZMAT with respect to its Federal Supply Nomenclature.
- B. Hazardous Waste (HW). HW is that HAZMAT which cannot be defined by the Resource Conservation and Recovery Act (RCRA) of 1976, thus requiring special disposal through landfill, incineration, or other methods.

7-3. HAZMAT MANAGEMENT

- A. HAZMAT management has historically placed more emphasis on the collection, management, and disposal of HW rather than the reduction of HW entering the waste stream. The RCRA of 1976 provides guidance in this area.
- B. Source reduction, as identified by the Pollution Prevention Act of 1990, emphasizes reducing the amount of any hazardous substance,

pollutant, or contaminant entering any waste stream or otherwise released into the environment prior to recycling, treatment, or disposal. Executive Order 12856, dated 3 August 1993, requires Federal Agencies to comply with the provisions of the Pollution Prevention Act.

- C. DoD Directive 4210.15, Hazardous Material Pollution Prevention, places emphasis on the reduced use of hazardous materiels in products rather than simply managing the HW created. Reduction in the use of HAZMAT can be accomplished in part by:
- 1. Using only standard stock numbered HAZMAT when feasible that has been scrubbed for "green" items.
- 2. Improving materiel management policies and procedures by practicing prudent shelf-life item management.
 - 3. Emphasizing procurement of less or non hazardous items.
- a. Materiel substitution whereby more products containing recycled or easily recycled materiels are used.
- b. Increased use of affirmative or "green" procurements (e.g., re-refined oil, recycled anti-freeze, recycled paper products).

7-4. MODEL FOR HAZARDOUS MATERIEL AND HAZARDOUS WASTE (HW) MANAGEMENT

- A. Military activities must comply with Federal, State, Host Nation and local directives. Federal directives emanate from EPA, DOT, FDA, CPSC, NRC, OSHA etc. It should be noted that EPA has levied fines against military installations and individuals for compliance infractions. In addition to Government regulation, military activities must comply with DoD Service directives and host nation final governing standards.
- B. A six-step process for managing HAZMAT and HW has been developed and is outlined below. The overall objective of the management program is to eliminate or reduce to the maximum extent HW/HAZMAT and carefully dispose of the remainder. The program is divided into the following segments:
- 1. Compliance with Federal, State, Host Nation and local directives.
 - 2. HW Reduction.
 - 3. HAZMAT Minimization.
 - 4. HAZMAT/HW Re-use.
 - 5. HAZMAT/HW/Recycling/Reclamation.
 - 6. HW Disposal.

7-5. COMPLIANCE WITH FEDERAL, STATE, HOST NATION AND LOCAL DIRECTIVES

- A. The RCRA is an EPA-regulated program which requires industry and the Government to strictly control the storage, record-keeping, and disposal of HW.
- B. The Pollution Prevention Act prescribes that U.S. National Policy is to prevent or reduce pollution at the source whenever feasible, to recycle materiel to avoid pollution, to treat in an environmentally safe manner, and to dispose of materiel only as the last resort. The Transportation Safety Act of 1974 (Public Law 93-633) provides direction

for the DOT to control the quantity and form of HAZMAT/HW being transported along public thoroughfares.

- C. Hazardous Communication (HAZCOM), 29 CFR Part 1910.1200 This is an OSHA-mandated program intended to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is distributed to employers and employees. The program requires container labeling and other forms of warnings, employee training, and the use of Materiel Safety Data Sheets (MSDS).
- D. Final Governing Standards for the Overseas Environmental Baseline Guidance documents are prepared by teams composed of U.S. Forces and host nation representatives, and address all environmental laws and standards requiring compliance.

7-6. HAZARDOUS WASTE (HW) REDUCTION AND ELIMINATION

- A. This step is usually accomplished by engineering changes and development of testing procedures. The objective is to eliminate completely or reduce the requirement for HAZMAT, and ultimately the generation of HW.
- 1. Engineering changes through product redesign. Examples of this are the use of a rustless product materiel to eliminate the need for painting or surface treatment; the use of mechanical instead of chemical cleaning; non-toxic soaps instead of hazardous solvents; water based glues and paints instead of oil based coverings; and recycling and reutilization of HAZMAT to eliminate or reduce HW generation.
- 2. <u>Testing Procedures</u>. Another aspect of the elimination step is hazardous testing, where products are tested to determine their true toxicity and whether declassification as an HAZMAT is possible.
- 3. <u>Subcontracting</u>. This occurs when a local commercial activity can perform cleaning and painting functions for an installation. Although this does not eliminate the HW problem, it can shift the primary responsibility for its disposal away from the government. However, in the case of some substances and processes, DoD may still retain primary responsibility for waste disposal even if it is subcontracted to a commercial vendor.

7-7. HAZMAT MINIMIZATION

- A. Product Substitution; Disposal of hazardous waste, and the subsequent higher level of regulation that accompanies this disposal, can be subsequently reduced if less HAZMAT is introduced at the front end of the waste stream.
- B. Authorized Use: Use stricter guidelines for authorizing HAZMAT for a particular process. For example, standardizing the use of solvents or cleaners will significantly reduce the volume of HAZMAT subject to disposal.
- C. Process Control: Provide for the separation of effluent to avoid mixture of hazardous effluent with other non-hazardous waste which contributes to the volume of HW produced.

7-8. HAZMAT/HW REUSE.

This step allows reuse of the effluent with little or no treatment. This can occur through the separation and reuse in a dirtier operation (e.g., counter flow rinses), or using a filter to separate dirt (e.g., alcohols and paint). Perhaps collecting waste and reusing it can be accomplished

for operations not requiring pure solvents during a process (e.g., some plating operations).

7-9. HAZMAT/HW RECYCLE AND RECLAMATION.

Recycling takes place when significant treatment is required to use the effluent for its original purpose. Recycling can be accomplished by the DoD Activity onsite, or off site (on-site by a vendor, or off-site by a vendor). Reclamation involves returning the original product to its original specification for future use.

7-10. HAZMAT/HW TREATMENT/DISPOSAL

- A. <u>Treatment</u>. This step requires special permits, equipment, and careful coordination with EPA, and state and local authorities. Within DoD it can be done by the activity, or vendor. Treatment involves processing waste to a non-hazardous or less hazardous substance through chemical or physical treatment or volume reduction methods. This process usually includes incineration or neutralization to less toxic or reduced volumes of HW.
- B. <u>Land Disposal</u>. Land fills, deep well injection, and land forming are examples of land disposal.
- C. <u>Export, Treat Or Destroy Off-Site</u>. Transportation of HW off-site does not remove the liability from an activity once the waste is either sold to a vendor or legally destroyed. This step involves the establishment of service contracts between the Government and commercial firms.
- D. $\underline{\text{Disposal Off-Site}}$. This step uses the same techniques as disposal on-site. However, this is the least desirable option since an activity's liability for the HW does not end.

7-11. HAZMAT REUSE STORE, PHARMACY, AND RECOUPMENT FACILITY

- A. Hazardous Reuse Stores, Pharmacies and Recoupment Facilities are facilities where turned-in HAZMAT in good condition is redistributed to users at no cost. HAZMAT such as shelf-life expired paints, solvents, and excess hazardous materiels are commonly turned in to the DRMO for disposal as hazardous waste. These facilities divert these materiels from disposal, thereby reducing disposal costs. At the same time, the tenant activities save money by obtaining materiels from these facilities at no cost except for transportation.
 - B. Reuse Stores are operated by both Navy and Air Force.
 - C. Pharmacies are operated by the Air Force and Army.
 - D. Recoupment facilities are operated by DLA.
- E. DoD Components shall make maximum use of these facilities where available. Where not available, efforts shall be made to establish a facility. Guidelines for instituting Reuse Stores are available in Navy Consolidated Hazardous Materiel Reutilization and Inventory Management Program (CHRIMP). The Navy Shelf-Life Program Administrator should be contacted for a copy of this Publication. Pharmacy information may be obtained from the Air Force Civil Engineer, Recoupment administrator or the Army Shelf-Life Administrator. Facility operation information can be obtained by contacting the DLA Administrator for the DoD Shelf- Life Program.

7-12. Department of Defense (DoD) HAZMAT/HW GUIDANCE

- A. DoD 6050.5-M pertains to procedures of the DoD Hazardous Materiels Information System (HMIS). This system provides reference data in four primary areas: MSDS, warning label, and disposal. This manual provides direction to each of the Military Services on the proper management of hazardous materiel.
- B. Joint Publication DLAM 4145.11/AM 38-410/NAVSUP PUB 573, AFJMAN 23-209/MCO P4450-12M, STORAGE AND HANDLING OF HAZARDOUS MATERIEL, provides direction to the Military Services on the storage and handling of hazardous materiels.

CHAPTER 8

RETAIL MANAGEMENT AND STORAGE OF SHELF-LIFE MATERIEL

8-1. APPLICABILITY.

All policies, except Chapter 3 in this manual and where as noted, apply to materiel managed and stored in both the retail and wholesale supply systems.

8-2. ADDITIONAL POLICIES.

The following additional policies apply to retail:

- A. Materiel will not be over ordered.
- B. Policies to preclude over ordering include:
- 1. Storing materiel for minimum periods and issuing it promptly. The goal should be to turn stock every 30 days if Mission is not impacted.
- 2. Limiting stock requisitioning to less than the requisitioning objective and disregarding Economic Order Quantity (EOQ) rules if they will result in over-requisitioning and excesses.
- 3. Conducting stock reviews of shelf-life items on hand at least monthly and ensuring that excesses are reported to the item manager for redistribution if in excess.
- 4. Conducting accurate inventories to ensure that excesses or expired stock are not inadvertently retained in stock.
- 5. Notify wholesale managers when units of issues are not appropriate and request consideration of more appropriate units of issue for shelf-life and hazardous items.

8-3. MATERIEL RETURNS.

Excess medical and perishable subsistence shelf-life items are not authorized for return to the DoD SAs.

APPENDIX A

SHELF-LIFE CODES

	1	T		
Shelf-Life	Type I	Type II	Required N	
Period			Months/Qua	
				Upon Receipt
			by the fir	
			Government	activity
			Months	Quarters
Nondeteriorative	0	0	N/A	N/A
1 Month	A	N/A	25 days	N/A
2 Months	В	N/A	50 days	N/A
3 Months	С	1	75 days	N/A
4 Months	D	N/A	3	1
5 Months	E	N/A	4	1
6 Months	F	2	5	2
9 Months	G	3	8	3
12 Months	Н	4	10	3
15 Months	J	N/A	13	4
18 Months	K	5	15	5
21 Months	L	N/A	18	6
24 Months	M	6	21	7
27 Months	N	N/A	23	8
30 Months	P	N/A	26	9
36 Months	Q	7	31	10
48 Months	R	8	41	14
60 Months	S	9	51	17
72 Months	I	N/A	61	20
84 Months	Т	N/A	71	24
96 Months	U	N/A	82	27
108 Months	V	N/A	92	31
120 Months	W	N/A	102	34
144 Months	Y	N/A	122	41
240 Months	Z	N/A	204	68
Medical items,		Х	85 percent	of number of
Parachutes and			months or c	quarters
Chemical				
Protective				
Clothing with a				
shelf-life				
period greater				
than 60 months.				

APPENDIX B

SUPPLY CONDITION CODES AS APPLIED TO SHELF-LIFE ITEMS

TABLE FOR THE APPLICATION OF SUPPLY CONDITION CODES TO SHELF-LIFE ITEMS

CODE	TITLE	DEFINITION
A	Serviceable (Issuable	Shelf life remaining is more
	Without Qualification)	than 6 months.
В	Serviceable (Issuable	Shelf life remaining is from
_	With Qualification)	3 - 6 months.
С	Serviceable (Customer	Shelf life remaining is less
Č	Concurrence Required	than 3 months.
	Prior To Issue)	
E	Unserviceable (Limited	Materiel which involves only
_	Restoration)	limited expense or effort to
	1102001010117	restore to serviceable
		condition and which is
		accomplished in the S/A
		where the stock is located.
F	Unserviceable	Economically reparable
_	(Reparable)	materiel which requires
	(repair, overhaul, or
		reconditioning includes
		reparable items which are
		radioactively contaminated.
G	Unserviceable	Materiel requiring
	(Incomplete)	additional parts or
		components to complete the
		end item prior to issue.
Н	Unserviceable	Type I shelf-life materiel
	(Condemned)	that has passed the
		expiration date and Type II
		shelf-life materiel that has
		passed its expiration date
		and cannot be extended.
J	Suspended (In Stock)	Type II shelf-life materiel
		that has reached the
		inspection or test date and
		is awaiting inspection test
		or restoration.
K	Suspended (Returns)	Materiel returned from
		customers or users and
		awaiting condition
		classification.
L	Suspended (Litigation)	Materiel held pending
		litigation or negotiation
		with contractors or common
	C	carriers.
R	Suspended (Reclaimed	Assets turned in by
	Items, Awaiting Condition Determination)	reclamation activities which do not have the capability
	Condition Determination)	
		(e.g., skills, manpower, or test equipment) to determine
		the materiel condition.
		Actual condition will be
		determined prior to
		induction into maintenance
		activities for
		repair/modification.
		reparr/mourrication.

APPENDIX C

PART 1

RCS DD-A(L)(A)1549

SERVICE AND/OR AGENCY MANAGED SHELF-LIFE NSNs (WHOLESALE) (31 December)

	CONSUMABLES		
	ADDITIONS	DELETIONS	NET CHANGE
TOTAL			
MANAGING ICP			
TOTAL			
MANAGING			
SERVICE			
AND/OR AGENCY			
GRAND TOTAL			
	NONCONSUMABLES		
	ADDITIONS	DELETIONS	NET CHANGE

MANAGING

SERVICE \$VALUE \$VALUE

\$VALUE \$VALUE

AGENCY ICP FSC NO. NSNs INVENT. NO. NSNs INVENT. NO. NSNs

INVENT. NO. NSNs INVENT.

NONCONSUMABLES

ADDITIONS DELETIONS

NET CHANGE

MANAGING

SERVICE \$VALUE \$VALUE

\$VALUE \$VALUE

AGENCY ICP FSC NO. NSNs INVENT. NO. NSNs INVENT. NO. NSNS

INVENT. NO. NSNs INVENT.

TOTAL MANAGING ICP

TOTAL MANAGING SERVICE AND/OR AGENCY

GRAND TOTAL

REMARKS: AN EXAMPLE OF REMARKS WOULD BE THERE IS A SIGNIFICANT INCREASE OR DECREASE IN THE NUMBER OF NSNs MANAGED OR DOLLAR VALUE OF INVENTORY.

PART II (APPENDIX C)

ANNUAL REPORT ON DISPOSAL AND UTILIZATION OF SHELF-LIFE CODED ITEMS (31 December)

<u>SECTION A</u> -- <u>SHELF-LIFE ITEMS RECEIVED FROM INVENTORY CONTROL POINTS</u> (WHOLESALE)

ALL CONDITION CODES

CONDITION CODE H ONLY

MANAGING NON- NON-

SERVICE CONSUM-CONSUM-CONSUM-

CONSUM-

AGENCY ICP FSC ABLE \$ VALUE ABLE \$ VALUE **ABLE**

\$ VALUE \$VALUE ABLE

TOTAL MANAGING ICP

TOTAL MANAGING SERVICE AND/OR AGENCY

GRAND TOTAL

SECTION B -- SHELF-LIFE ITEMS RECEIVED FROM OTHER THAN INVENTORY CONTROL POINTS(RETAIL)

ABLE

ALL CONDITION CODES NON-

CONDITION CODE H ONLY

CONSUM-

ABLE

\$ VALUE

TURN-IN

NON-

CONSUM-CONSUM-

\$ VALUE

SERVICE CONSUM-

AGENCY <u>FSC</u> ABLE ABLE \$ VALUE

TOTAL SERVICE AND/OR AGENCY

GRAND TOTAL

SECTION C -- UTILIZATION AND TRANSFER OF SHELF-LIFE ITEMS

SEGMENT 1 -- SHELF-LIFE ITEMS UTILIZED BY DOD

NON-RECEIVING

SERVICE CONSUM-CONSUM-

AGENCY FSC ABLE \$ VALUE ABLE \$ VALUE

TOTAL SERVICE AND/OR AGENCY

GRAND TOTAL

SEGMENT 2 -- SHELF-LIFE ITEMS TRANSFERRED TO NON-DOD ACTIVITIES

NON-

\$ VALUE

CONSUM-

ACTIVITY FSC CONSUMABLE \$ VALUE ABLE

\$VALUE

TOTAL NON-DOD ACTIVITIES

GRAND TOTAL

SECTION D -- DONATION, SALES, ABANDON AND DESTROY, DOWNGRADE TO SCRAP, AND THER DISPOSITIONS

OF NSNs \$ VALUE **PROCEEDS**

SEGMENT 1 -- DONATION N/A

SEGMENT 2 - SALES N/A

SEGMENT 3 -- ABANDON AND/OR N/A

DESTROY

<u>SEGMENT 4</u> -- <u>DOWNGRADE TO</u> <u>SCRAP</u> N/A

SEGMENT 5 -- OTHER DISPOSITIONS

GRAND TOTAL

REMARKS: May apply to sections A or B; e.g., if a significant amount of shelf-life materiel is disposed of and this materiel was held only for emergencies, not for issue, this would be included in the remarks.

APPENDIX D

CHARTER FOR THE SHELF-LIFE COMMITTEE

This charter establishes objectives and responsibilities of the Shelf-Life Committee. The committees purpose is to develop, monitor, evaluate, and enhance a program of shelf-life control for DoD, GSA, FAA, AND USCG materiel.

A. MEMBERSHIP

- 1. The Committee shall be chaired by the Director, DoD Shelf-Life Program. The DoD Shelf-Life Program Director function has been delegated to the Director, DLA, by the USD (A).
- 2. The DoD Components, GSA, FAA and USCG each shall provide a representative who has the necessary functional expertise in all aspects of the program. This representative shall be the shelf-life point of contact for all shelf-life functions within the DoD, GSA, FAA, and USCG.
- 3. USD (A) or other DoD Components shall provide representatives, as appropriate.

B. RESPONSIBILITIES

- 1. The members of the Shelf-Life Committee shall:
- a. Evaluate the Shelf-Life Management Program and recommend program enhancements as changes to DoD 4140.27-M.
- b. Review and analyze the reporting requirements in RCS DD A(L)(A)1549, and RCS DD A (L)(A)1902 for their respective Components and provide analysis to the DoD Shelf-Life Program Director, as appropriate. Monitor and investigate adverse trends and high rates of disposal.
- c. Make distribution of the DoD Shelf-Life Item Management Report, RCS DD A(L)(A)1549, to all responsible DoD officials to include, as a minimum, the ICP shelf-life focal points.
- d. Provide representation to shelf-life meetings and recommend that DoD task the DoD components, GSA, FAA & USCG, with any significant actions resulting from these meetings, as reflected in the minutes.
- e. Resolve problems identified by DoD Components, GSA, FAA and USCG through direct coordination within the Committee.
- $\ensuremath{\text{f.}}$ Furnish the Chair any items of interest for consideration by the Committee.
- g. Recommend policy changes, when considered necessary, to the Director, DoD Shelf-Life Program.
- h. Participate in shelf-life surveillance visits to DoD components, GSA, FAA, and USCG activities.
 - 2. The Director, DoD Shelf-Life Program shall:
- a. Be responsible to the ASD (A) for the successful accomplishment of Committee objectives and discharge of Committee responsibilities.
- b. Convene the Committee when required to resolve problems and discuss other items of interest.

- c. Submit minutes of each Committee meeting and surveillance trip report to the other DoD Components, and to the GSA, FAA, and USCG.
- d. Present to the Committee for resolution any problems that arise from the shelf-life surveillance visits.
- e. Maintain DoD 4140.27-M and Joint Regulation DLAR 4155.37/AR 702-18/NAVSUPINST 4410.56/AFJMAN 23-223/MCO 4450.13.
- f. Maintain a current list of Service and Agency Shelf-Life administrators.
- g. Submit the "DoD Shelf-Life Item Management Report" to the Committee members.
- h. Serve as Chair to resolve problems resulting from surveillance visits, audits, and proposals from management.

C. ADMINISTRATIVE

- 1. Meetings shall be conducted triennially at the call of the chair. Surveillance visits shall be conducted as required.
- 2. Sponsors of Committee members shall fund necessary travel and administrative costs associated with Committee meetings and surveillance visits.

APPENDIX E

CHARTER FOR THE SHELF-LIFE SUBCOMMITTEES

A. OBJECTIVES

- 1. Evaluate and enhance the supply chain (life-cycle) process for specific commodities as they relate to shelf life.
- 2. Resolve issues and problems identified by DoD Components, General Services Administration (GSA), Federal Aviation Administration (FAA), and United States Coast Guard (USCG). DoD Components refer to the Army, Navy, Air Force, Marine Corps, Defense Logistics Agency (DLA), and Defense Nuclear Agency (DSWA). Enclosure 1 of the charter will contain a listing of initial issues and problems to be resolved.
- 3. Initiate procedural and process changes to enhance program $\mbox{\tt management.}$
- 4. Recommend policy changes to DoD 4140.27-M and other policy documents.

B. MEMBERSHIP

- 1. The subcommittee shall be chaired by the appropriate activity as designated by the Shelf-Life Program Director.
- 2. The DoD Components and, if applicable, GSA, FAA, USCG, Defense Depot Regions, each shall provide a representative who has the necessary functional expertise of the process to be addressed. Members may delegate responsibilities to field activities. Representatives may draw upon all appropriate resources, e.g., other Inventory Control Points, Storage Activities, Customers, Industry, Manufacturers, or Specification Preparing Activities.

C. RESPONSIBILITIES

- 1. The members of the subcommittee shall:
 - a. Attend and participate in subcommittee meetings.
 - b. Work toward achieving objectives of the subcommittee.
- c. Furnish the chair with information pertinent to the subcommittee or with additional issues/problems.
 - 2. The Chairperson of the DoD Subcommittee shall:
- a. Maintain a current list of representatives to the subcommittee who will be included in enclosure 2 of the charter.
- b. Convene the subcommittee, when required, to resolve problems or address issues.
- c. Be responsible for the successful accomplishment of the subcommittee objectives and responsibilities.
 - d. Recommend policy changes to responsible policy offices.
- e. Report progress to the DoD Shelf-Life Committee at scheduled DoD shelf-life meetings, or to the Director, DoD Shelf-Life Program, as requested.

D. ADMINISTRATIVE

1. Meetings shall be conducted at the call of the Chair.

- 2. Subcommittee members shall fund necessary travel and administrative costs associated with meetings and visits.
- 3. Completion date for subcommittee objectives is "as determined." Objectives not completed by the "as determined" date will be reevaluated for an extension of completion date or termination.

APPENDIX F SHELF-LIFE EXTENSION FORM

PER DOD 4140.27-M, CONTAINERS REQUIRE RE-MARKING WITH EXTENDED SHELF-LIFE DATA. UNITS OF ISSUE REQUIRE RE-MARKING UPON OPENING CONTAINER.

NSN: 9160-00-965-2376

CONTRACT NUMBER: DLA40090C5243

LOT/BATCH NUMBER: QA03009

DATE TESTED: 091997

NEXT INSP/TEST DATE: 091999

AUTHORITY: QSL

(QSL, MQCSS, OTHER)

INSPECTED BY: DDSP 243

(ACTIVITY AND INSPECTOR'S NAME OR NUMBER)

APPENDIX G

MILITARY SERVICE AND AGENCY ADMINISTRATORS FOR THE DOD SHELF-LIFE PROGRAM

The following are the DoD Service and Agency administrators for the DoD Shelf-Life Program. These administrators are responsible for all shelf-life functions within their respective Service or Agency. ICP, SA, DOSO, and other key points of contact are available from the administrators. Problems, issues for DoD consideration, suggestions, recommendations for improvement and all other shelf-life concerns may be addressed to the administrators. Changes should be provided as they occur to the Director of the DoD Shelf-Life Program.

SERVICE/ AGENCY	ADMINIS TRATOR	OFFICE SYMBOL	DSN PHONE	COMMERCIAL PHONE	FAX <u>NUMBER</u>	E-MAIL
DoD	Michael Pipan	DLA-MMLX	427- 1585	703-767- 1585	2628	michael_pipan@hq.dla.mil
DLA	Marvin Williams	DLA-MMLS	427- 3504	703-767- 3504	3513	marvin_williams@hq.dla.mil
ARMY	Ken Pillar	LOGSA-PSCC AMXLS-TP	795- 7685	717-895- 7685	7894	kpillar@logsa.army.mil
NAVY	Debbie Trautman	NAVICP-M Code 054	430- 1506	717-790- 1506	3480	debbie_trautman@icpmech.navy.mil
AIR FORCE	Jim Bagg	USAF-ILSP	227- 2431	703-697- 2431	7570	baggj@af.pentagon.mil
MARINE CORPS	George Barchuk	USMC-LPP2	426- 1051	703-696- 1051	1079	barchukg@hqi.usmc.mil
DSWA	Ann Wilson	FCDSWA/FCPNM	246- 8907	505-846- 8907	4248	wilson@fc.dswa.mil
GSA	Tom Bacon	GSA-FSS-FCO	N/A	703-305- 6573	6731	thomas.bacon@gsa.gov
FAA	John Mincel	FAA-ALM-300	N/A	202-267- 8840	5357	john.mincel@faa.dot.gov
USCG	Sherry Larkin	USCG/ELA-2	N/A	202-267- 2601	4516	slarkin@comdt.uscg.mil